

# MARINE RECORD

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To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and to improve the character of the service rendered to the public.

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## COL. LYDECKER'S REPORT.

From Col. G. J. Lydecker's annual report for the year ended June 30, 1891, which has just been made public, we quote as follows:

Improvement on the ship canal connecting the waters of the great lakes between Chicago, Duluth and Buffalo.—The estimated cost of this improvement, which was entered upon by congress in 1892, \$3,340,000. It provided for a ship channel twenty and twenty-one feet in depth, and a minimum width of 300 feet in the shallows. During the past year work has been in progress in the St. Clair and St. Mary's river sections. In summing up, Col. Lydecker says: "The total expenditure to June 30, 1901, excluding liabilities then outstanding, was \$2,962,072.29, and the total excavation to that date was 10,549,566 cubic yards.

The depth now available on the shoalest part of the ship canal between Chicago, Duluth and Buffalo is 18½ feet, and this limiting depth is confined to the section of the Detroit river which is included between the Lime Kiln crossing and the south end of Bois Blanc island. The unexpended balance, \$357,710, will be used as occasion requires in widening and deepening the channel at points where such work is needed to make navigation safe and convenient, and in removal of newly discovered shoals or obstructions in the line of the through travel between the specified terminals of the ship canal. No further appropriation is required at this time.

Improvement of St. Mary's river, at the Falls.—This project of constructing a new lock of 100 feet wide and 800 feet long, between the gates, with a single lift of eighteen or twenty feet, according to the fluctuation of the upper and lower levels, and depth of twenty-one feet over the sills, the canal and its approaches to be deepened to correspond, was begun in 1886. The estimated cost was \$4,738,865, while the total expended to date has been \$3,969,430. The present unexpended balance, \$786,857, is sufficient to complete all work contemplated by the present approved project, so no further appropriation is needed.

Operating and Care of St. Mary's Falls canal.—The canal was in service 231 days last year, the closed period of 134 days being December 13, 1900, to April 26, 1901. The number of lockages made during the year was 8,875, by which 14,975 vessels of 18,345,306 tons registry passed to and from Lake Superior, with 20,994,320 tons of freight and 33,327 passengers. The business of the Canadian canal during the same period was only 2,742,392 tons of

freight and 26,900 passengers. The total of the Lake Superior traffic was, therefore, 23,736,712 tons of freight and 62,227 passengers. This, as compared with previous years, is a decrease of 14 per cent in freight tonnage and an increase of 22 per cent in passenger traffic. The estimated amount required for the coming year is \$110,000.

Improvement of Hay lake channel.—The improvement was commenced in 1883, and opened to navigation in 1894. The result was a new line of travel through the St. Mary's river eleven miles shorter and four feet deeper than that formerly available, and one that can be navigated at night with a reasonable degree of safety.

The last congress recognized the necessity of such proposed improvement between Lake Superior and Huron, including Hay lake channel, as will secure a safe and convenient channel 21 feet deep, and the bill which then failed to pass, contained a paragraph authorizing continuing contract expenditures aggregating \$4,500,000 for the purpose. It now seems probable that the next congress may take favorable action in this matter and such action is highly important to the vast commerce that is interested in the earliest possible completion of the proposed improvement. Total amount appropriated, \$2,515,142; available balance, \$301,917; amount asked for improvement during the next year, \$144,115.

## IRON ORE PRODUCTION IN 1900.

A report recently completed by the geological survey shows that during the calendar year 1900 this country produced over 27,500,000 tons, making the world's record in this metal. In two years there was a gain of almost 50 per cent in the output of iron ore in the United States, the increase from 1898 being as follows: 1898, 19,433,716 tons; 1899, 24,683,173 tons; 1900, 27,553,161 tons.

Twenty-four states and two territories contributed to make up the total of over 27,000,000 tons of ore produced last year, and each of the states, with the exception of Pennsylvania, Virginia, New York and Tennessee, showed an increased production over the preceding year. Considered geographically the increase in the iron ore output in 1900 over that of 1899 was most pronounced as to quantity in Minnesota, but the greatest percentages of gain were in the less important contributors, Maryland, Missouri and the group of Montana, Nevada, New Mexico, Utah and Wyoming. Michigan is the leading iron ore producing state, yielding 9,926,000 tons last year, being followed closely by Minnesota with 9,834,000 tons. The only other state to be anywhere near to Michigan and Minnesota in this regard is Alabama, with 2,750,000 tons. The total value of the iron ore mined last year was \$66,599,604, an average of \$2.42 per ton. This indicates an increase of \$1 per ton. The lowest average value reported per ton was 82 cents in the state of Texas, where convict labor is employed in some of the mining operations. The highest value was \$3.71 per ton in Colorado. Whether the production of ore this year in the United States will exceed that of 1900 is doubtful.

## CARGO CARRYING RECORDS.

Relative to cargo carrying records they not unfrequently work out, as at Conneaut last week. The steamer Ellwood arrived and reported 7,100 tons, but it over-run 113 tons, thus making the actual weight 7,213 tons. A few weeks ago the John W. Gates reported her cargo as containing 7,300 tons, and claimed the port record for the season. However, it worked out just 200 tons less, and now the Ellwood takes the record with 87 tons less than the former quoted, 7,300 tons.

## ABOUT THE WEATHER BUREAU.

Prof. Willis L. Moore, Chief of the Weather Bureau Department of Agriculture, at Washington, has been severely criticized by unprofessional parties. So persistently have these attacks been made that Mr. Moore has felt the necessity of noticing them. What he says is interesting to the general public from the fact that he explains matters about which there is a good deal of mystery and consequently a good deal of misunderstanding.

In a general way the public understand that the purpose of the Weather Bureau is to give timely information to agriculturists and mariners of meteorological conditions and manifestations likely to affect the vast interests they represent. The weather stations in the cities and important points for observation send their reports to Washington and make them public in the localities in which their observations are made. Merely local prognostications are given, of course, and in a general way they serve a useful end. But Prof. Moore makes us understand that weather forecasting is not an exact science. "Instrumental measurements are made with precision," he says, "and the observations, therefore, are scientific, but the forecasts are made by imperial reason." And then he adds: "I am thoroughly satisfied with the general accuracy of the weather reports, and so are the property interests of the country. The marine and commercial interests are satisfied with our work; and if it were not acceptable to the two committees of Congress, we would not get an annual appropriation of \$1,100,000 to maintain the weather service."

The public do not hear of the millions of money and the thousands of lives that have been saved by the timely warning of hurricanes that sweep the inland lakes and make dangerous the seaboard of our vast country washed by two oceans, and which tell of approaching blizzards, blinding storms, and the like in the aroused atmospheric changes of seasons. How trifling seems the failure to locate correctly a shower or a snow storm, or to tell with exactitude when the wind may blow "from fair to brisk." The greatest usefulness of the Weather Bureau has to do with the greater concerns of meteorological conditions and manifestations that come from instrumental measurements made with precision.

Prof. Moore in an earnest and manly way says this to his critics:

"I have no right to expect immunity from criticism. The words and acts of every public official are matters that should be discussed and criticised by the press. The American press, which is the least venal and most heroically honest of any in the world, is more feared by dishonest and inefficient officials than are the statutes against crime. Personal malice may, in isolated cases, prompt an attack, but in such cases there will be defenders if the attack is unjust."

## WIRELESS TELEGRAPHY ON THE PACIFIC SLOPE.

It is reported that experiments with wireless telegraphy for reporting incoming ships will soon be made between Tatoosh Island, lying off the entrance to the Straits of Juan de Fuca, the principal gateway to and from Puget Sound, and Neah Bay. The government at one time maintained a station for reporting and observation on the island, but the cable to Neah Bay was broken several years ago and vessels have been obliged to report from Neah Bay, situated inside the straits, since that time. The government now proposes to re-establish the Tatoosh Island station and reopen telegraphic communication with the main line. If the experiment with wireless telegraphy fails a cable will be laid between the island and Neah Bay.





## DETROIT.

*Special Correspondence to the Marine Record.*

Word has been sent out by the Longshoremen's Union to boycott the Anchor Line in every way possible and at all the ports at which the vessels of the line may touch.

A report is current that millionaire Lyman C. Smith of Smith premier typewriter fame will close contracts for a fleet of steel transportation steamers for lake service.

George Y. Wisner, Esq., ex-United States deep water commissioner, has just been appointed a member of a commission for investigating the water supply of the city of Louis, Mo.

The steamer Cartagena passed up Monday night with the two steamers Badger State and Empire State in tow, for Bay City. The old boats were recently purchased in Cleveland by Barry Bros., Chicago.

The car ferry steamer Sainte Marie went aground on Graham shoals on Monday in a dense fog. She was going at a good speed and ran out four feet on the rocks. The car ferry St. Ignace was sent at once to her assistance. If any damage is found, she will be sent here for repairs.

Neither Colonel Lydecker nor Major Fish, Corps of Engineers, U. S. A., is to be disturbed as a result of the assignment of Capt. Lansing H. Beach to duty near Detroit. Major Thomas H. Handbury, present engineer in charge of the eleventh light-house district, with headquarters at Detroit, will probably be transferred to New York.

It is now on the cards that the new Detroit & Buffalo line, the Detroit & Cleveland line, and the White Star line will build an immense pavilion extending from Wayne to Griswold streets, with accessory freight sheds and storage houses. If this project is carried out it will give the lines the finest and most complete passenger and freight terminal facilities on the Great Lakes.

The new steel passenger steamer Iroquois built by the Craig Ship Building Co. for the Arnold Line was at the docks of S. F. Hodge & Co. this week for repairs to her cylinder head. She will be placed on the route between Cheboygan and Sault Ste. Marie with her sister ship the Chippewa. The latter vessel has been sent to Toledo to receive a new rudder, a log or other floating object, having broken her former one.

The screw steel steamer Huronic, to run from Windsor or Sarnia to Duluth, via Port Arthur and Fort William, will be launched about August 20 from the yards of her builders, the Collingwood Ship Building Co. The Huronic will be one of the largest vessels ever built in Canada. She is built of open hearth steel throughout, is 325 feet over all, 308 feet between perpendiculars, 43 feet beam and 27 feet molded depth. It is expected that she will be able to steam 15½ miles an hour loaded and 17½ miles light.

Whether it is late in the day or otherwise, measures are now being taken to ascertain how much water flows through Detroit river. It has evidently been brought to the attention of some one that there is a leak in the supply, with a probability of several others eventuating within the next few years, and to such an extent as to affect the level of the lakes. Anyway, gauges are now being placed for the purpose of measuring the discharge, fluctuation in same, etc. It looks like a curse on the lake marine that all this has not been thoroughly done years ago.

Marine reporter Joe McLaughlin, Port Huron, has to his credit the rescue of seventeen lives, and it is pertinently said that if ever a man on St. Clair river, or anywhere else, was entitled to recognition by the United States government, in the award of medals, that man is Joe McLaughlin. He never speaks of what he has done, though he is always ready to make a plunge and rescue a fellow-being summer or winter. His many acts of bravery will be called to the attention of Senator McMillan and Congressman Weeks, so that, in the course of time, he may be rewarded with a medal.

Some of the marine engineers are not very much elated at the prospect of casting in their lot with the Longshoremen's Union and being made amenable to their by-laws and rulings, as it is thought that disputes in one branch or

another may become too frequent for comfort, and it is said that the entire matter will have to be acted upon at the next annual meeting of the Marine Engineers' Beneficial Association next winter. In the event of the majority of lodges joining the International Longshoremen's organization, it will sever the lake engineers from the ocean, coast and river branches, and, even so, some engineers are of the opinion that this would be the proper step to take. Whether the masters and pilots affiliate or not, the whole situation can be controlled by the engineers.

The Licensed Tugmen's Association of the Great Lakes, with headquarters at Milwaukee, has decided that the act of the crew of the tug Columbia in rescuing the only two survivors of the Baltimore on Lake Huron, May 24, was an act worthy of emulation, and as a slight token of their approval of the heroic act they have prepared medals for the four men of the crew who assisted in the rescue. These medals were sent this week from Milwaukee to M. A. Palmer of Detroit, secretary of the local branch of the association, for presentation, and will be given to the men as soon as they come into port. With each medal is a letter, one of which is sent to Herbert Hickmott of Detroit. The letter says: "This is the first time this or any other order of the Great Lakes has ever presented medals for deeds of distinguished valor, but the exception is merited by the circumstances."

## DULUTH-SUPERIOR.

*Special Correspondence to the Marine Record.*

John Hitchcock, second mate of the steamer Rappahannock, owned by the Davidson Steamship Co., was accidentally killed at Duluth this week while on board his vessel. Hitchcock was a married man and had a family living at Port Huron.

The steamer Fanchon, owned by Capt. LaFrambois and Dion, which was recently fined \$500 by the collector of customs for going outside the limit specified in her certificate of inspection, has succeeded in having the fine reduced to \$10. The boat came from the Port Huron district.

It is considered here that Capt. George MacDougall, of the Canadian owned steamer Athabasca, exhibited great skill and humane propensities in rescuing the crew of the waterlogged steamer Preston, abandoned on Lake Superior. The rescue was effected after ten hours work, and eleven men out of the crew of twelve were picked up, the other being the vessels coming together.

Advices from Eau Claire are to the effect that one of the biggest timber deals that has been made in Northern Minnesota in many years has just been consummated, whereby Cook & Turrish, of Duluth, and their associates, transfer to the Brooks Timber Co., 170,000 feet of pine in St. Louis and lake counties for a consideration of \$1,000,000 in round figures. The Brooks Timber Co. is the pine corporation of the Brooks-Scanlon Lumber Co., and the Scanlon-Gibson Lumber Co. William O'Brien is also interested.

The International Steamship Co., of which Capt. A. B. Wolvin, is president, has received an offer to treat regarding the sale of the steamer Paraguay. Capt. Wolvin, when asked to confirm the report was very reticent, and said that he was not prepared to give out any information. It is learned, however, that the stockholders of the company have the matter under consideration.

The small steamer Preston, abandoned waterlogged early this month on Lake Superior, will be repaired at the West Superior shipyard. The vessel would undoubtedly have been a total loss had it not been for her cargo of lumber, which kept her afloat until she was towed to Port Caldwell, Ont. At that port she was libeled for \$15,000 by a fisherman for services with his fishing tug. Then followed the steamer Root incident, which was happily ended by the customs officer at Port Arthur remitting a heavy fine against the Duluth boat for going to the assistance of the Preston at Port Caldwell without first obtaining a permit from the Canadian authorities. The Athabasca rammed her bow during the time she was rescuing the crew. Rough, temporary repairs were made to the Preston at Port Arthur before the start was made for Duluth, and pumps were kept going during the trip here. The master of the Athabasca might have known that a lumber laden hooker would not sink even if the crew did not. Of course his share of salvage would have not amounted to very much, but a good sized check might have been placed to the credit of his wealthy owners, if he had shown savvy enough to avail himself of the opportunity to earn it for them.

## BUFFALO.

*Special Correspondence to The Marine Record.*

Capt. George W. Starkey has taken charge of the steamer Uganda, vice Capt. W. W. Wilkins, called home to Erie to bury his late wife.

The Union Steamboat Co.'s steamers Rochester and New York have been added to the Union Transit Line fleet, which trades exclusively between Buffalo and Lake Superior ports.

The wooden steamer R. A. Packer, owned by John A. Connelly, and hailing from Chicago is in dry dock for a thorough overhauling and repairs. She is 921 tons gross, and was built at Bay City in 1881.

The Cleveland-Euclid Beach ferryboat Superior has been chartered for the season by the Crystal Beach Co., and is already quite a favorite on the route. Her sister boat, the Duluth, is in the Green Bay service.

The barge Delos De Wolf, in years gone by one of the smart lake schooners, is still found worthy of holding a class. The De Wolf was built in Oswego in 1856, her gross tonnage is 307, and she is now owned by Capt. J. J. Boland of this port.

Lake survey charts, which formerly could only be purchased in Detroit, can now be secured in the United States Engineer's office, on the fifth floor of the Postoffice building. This will be a great convenience to masters and others who have occasion to use charts.

The Rutland Transit Line is involved in a labor dispute with the longshoremen. Their request is for 35 cents an hour overtime. The company has asked for non-union men, and offered \$1.50 a day, 25 cents an hour for ordinary overtime, and 50 cents an hour for Sunday work.

The barge Myron Buttman, of Toledo, which has been in dry dock for temporary repairs has been taken to Tonawanda to discharge her lumber cargo. After this is done a survey of the damage sustained in her collision with the Harvard will be made and probably final repairs ordered made.

Total shipments of coal for the month were 215,710 tons, as against 238,404 for July last year. Total shipments for the season to date are 736,822. Last year 969,805 tons had gone forward at this time. During July the receipts of grain amounted to 14,430,031 bushels and of flour 1,509,616 barrels. The greatest uneasiness is felt regarding the lack of anthracite coal in the west and a great rush must surely set in before the close of navigation to make up for the stagnation throughout the earlier part of the season.

The Union Transit Co. will likely lose the services of the steamer Avon. She has been found to be so badly burned as to make a constructive total loss. For several days after arriving at Buffalo in tow of the Portage, she was hampered by the \$25,000 salvage libel of the steamer Victory. On discharging the cargo it was found that not over 6,000 bushels of her 50,000 bushels of wheat was injured and the flour was in fair shape. She was built in 1877, at Buffalo, but has been so well taken care of that she is still rated A2 and given a valuation for insurance purposes of \$28,000 which is an excellent showing for a 1,700 ton wooden vessel of her age.

The rush of lumber to the Tonawanda ports still continues and the record for the month of July will certainly be the largest for any one month at the Tonawanda ports for several years. Between 6,000,000 and 7,000,000 feet of lumber has arrived in the two ports within the last twenty-four hours, bringing the present total up to nearly 84,000,000 for the month. These figures are simply stupendous and could scarcely be believed by those not conversant with the business carried on in the upper reach of Niagara river. Some pretty slick handling of lumber has been done in the past but the Tonawanda imports place all previous records in the shade, in so far as this "neck-o-the-woods" is concerned.

Capt. James Davidson, of Bay City, was here this week, as he has been more or less, and always, during the season of navigation. He did not pre-empt a location for his new steel shipyard, engine shops and boiler works, nor was it at all certain that he would on his arriving at Erie, Pa., where he went from here. No doubt but that Capt. Davidson will establish a modern plant for his two capable sons to control in the near future, and it has been learned that he has all particulars at hand for so doing, also the cash capital required; at the same time, no new steel ships will come from the Davidson yards in the near future, and the present outbursts regarding same is the periodic talk which has been current at any time during the past few years.

LEWIS NIXON has just received an order for two gunboats for the Mexican Government.



## CHICAGO.

*Special Correspondence to The Marine Record.*

C. W. Williams, president of the Williams Transportation Co., says that the steamer Easton has not been sold.

The cruising yacht Kid, Vernon Seaver, owner, valued at \$6,000, was destroyed by fire while filling her gasoline tanks at the Columbia Yacht Club House on Tuesday.

Orders already placed with the mills on specifications for shipbuilding material have been figured on for two or three months ahead, so that contracts for new tonnage will call for months of delay beyond a usual or ordinary time of delivery.

The passenger steamer Easton, owned by the Williams Transportation Co., has been sold to Milwaukee parties and will be delivered to her new owners September 1. The Easton was purchased from a company at Baltimore, Md., this spring and brought to the lakes.

According to the advertisement in British marine papers, the Northwestern will leave Manchester August 5 and Liverpool five days later, but she won't. She'll be in luck even to smell salt water at, on or about that date. As the RECORD has consistently stated, these boats have no reason for being on the Chicago-Atlantic route.

There is considerable talk going on at times regarding the union affiliations, which masters and pilots, as well as engineers, will enter upon at the close of navigation, but as a good deal of it is a matter of personal views, there is little good to be attained by repeating the talk. Evidently salaried men are guessing how best to secure and improve their positions.

The talk about changing the route of the large passenger steamers North West and North Land next season is not credited here. An official of the company stated that while he had not heard of the matter being discussed, he saw no reason why any change should be made and that everything pointed towards the boats being kept on the Chicago-Buffalo route for another season at least.

The ripple made recently in stating that the Northwestern Steamship Co., Counselman et al, would lay keels for a fleet of ten steel steamers for the Chicago-Atlantic route has flattened out and this is no longer considered the direction from which a bolus of new tonnage may spring. It is thought though, that Capt. Wolvin and his business associates may have something of this nature up their sleeves for late delivery next season.

Mr. John Paterson, representing one of the largest shipbuilding plants in Scotland, is in this country inspecting the various ship yards and steel works, especially their equipment. On his visit to the various plants, where pneumatic tools and appliances are extensively used, he was favorably impressed with those manufactured by the Chicago Pneumatic Tool Company, and visited their plant at Olney, Philadelphia, and the Boyer Machine Company, Ltd., at Detroit.

The steamer Tampico, built at Toledo for coast service, is now on her passage to the Pacific coast via the Straits of Magellan. A letter just received from Capt. K. A. Jenson, states that he put into Monte Video for some hull repairs after which he would proceed on his passage. The Tampico is rated A1 in Inland Lloyd's and given an insurance valuation of \$155,000. It is understood by all parties interested that her purchaser is enquiring about the price of other lake-built steamers, though he is not talking about building as contracts are now placed well ahead at all lake shipyards.

The Canadian yacht Invader, Capt. Jarvis, has been shipped by rail from Toronto and is due here now. Several days will be spent in getting her into proper racing trim and then all she asks is wind and enough of it. In the meantime the two Detroit yachts, the Milwaukee and the Illinois, are belting at it to prove or show who is the conqueror and which one will be told off to meet the Invader. There is as much interest manifested in even the trial races as was evidenced in the old times between the passages of China tea clippers, if such a comparison will stand for it. Certainly there is as much sailorizing being done all around.

Major J. H. Willard, Corps of Engineers, U. S. A., in his annual report on rivers and harbors for the district of Chicago, recommends legislation to secure a navigable depth of twenty-six feet in both the inner and outer harbors, which will insure heavily loaded vessels against pounding on the bottom in a swell. He recommends the dumping ground in the lake to be moved in accordance with the views of the health department. Major Willard makes the following estimates: Dredging harbor and river to Rush street, Chicago,

\$230,000; construction of turning basins in Chicago river, \$75,000; Calumet harbor, Chicago, continuing improvements, \$419,480; Calumet river, Chicago, continuing improvements, \$510,000; Illinois river, \$257,000; Illinois and Mississippi canal, to complete project, \$778,250.

## CLEVELAND.

*Special Correspondence to The Marine Record.*

Mr. J. C. Gilchrist is spending a few days at Atlantic City and is expected to return early next week.

Toledo may be a safe enough harbor by this time but the masters and owners of the Cadillac will hardly think so after her fetching up there on Saturday last.

Conneaut ore receipts amounted to 600,000 tons last month, but even that quantity has been exceeded in July by 2,000 tons and the ore is fast piling up on the docks.

At a meeting of the directors of the Cleveland & Buffalo Transit Co., held on Monday, the regular quarterly dividend of  $1\frac{1}{4}$  per cent., payable August 1, was declared.

The handsome steam yacht Say When, owned by the Hon. W. J. White, is now on her way to Bar Harbor, Me. Capt. George Fleming piloted her from Oswego to Montreal.

A notice has been posted in the river custom house stating that hereafter no more sailors will be vaccinated at that place, but that any seamen wishing to be vaccinated might call at the U. S. Marine Hospital.

The labor trouble about handling general cargoes in the line boats is about being brought to a close. The Anchor Line is the exception and its managers don't appear to want to get mixed in with the latest union rulings.

Major Dan C. Kingman, Corps of Engineers, U. S. A., has ordered a 34-foot launch from the Detroit Motor Works for delivery at this station within 30 days. The launch will be used for patrol, inspection and surveying duties.

The steel trust has kept iron ore rates steady if it has done good in no other direction. The opening rate which they first offered is still maintained and all comers taken care of at that. Of course the rate is a low one but the best despatch possible is given at both loading and discharging ports.

In entering Ashtabula on Monday the Venezuela, Capt. W. Maltby, walked into the Kahne block, a three-story brick. The vessel had no tug and failed to make the bend in the river below the swing bridge. Repairs to the building will cost more than the services of a tug would have amounted to.

It is said that Capt. James Davidson means business and is now ready to go ahead with the establishment of a steel shipyard second to none on the lakes. He seems to center his mind on a location somewhere east of Cleveland and it is known that other capitalists are closely interested in his deliberations.

It is learned that the two 5,000-ton steamers, for which contracts were closed with the American Ship Building Co. a few weeks ago, are for C. G. Tomlinson, the Duluth vessel broker, and Frank Seither, Cleveland. Mr. Seither is manager of the Union Dairy Co., and is managing owner of the steamer V. K. Ketcham. The new boats will be delivered early next season.

A long, strong pull will be made by all interests at the next session of Congress in favor of large appropriations in the river and harbor bill. It is well known that Senator Hanna's views regarding the extension of the local breakwater are not entirely in consonance with those of Hon. T. E. Burton, M. C. for this district and chairman of the River and Harbor Committee, who entertains the same opinion as the U. S. Engineer in charge of the district.

The International Steamship Co., A. B. Wolvin, of Duluth, president, has sold the steamer Paraguay to eastern parties. The price paid for the boat is placed at \$250,000, but the name of the purchaser is not learned. The Paraguay was built at the Lorain yards of the American Ship Building Co., was sent to the coast last fall and brought back to the lakes early this season to be placed in the ore trade. She will be converted into a bulk oil carrier or tank steamer.

The Paraguay, built last year for service on the coast, is now at Lorain being converted into a bulk oil carrier. It is proposed to put her into service carrying oil from the Texas oil field. When completed she will have two large steam pumps to pump oil. Double bulkheads and a fore-and-aft bulkhead and six lines of pipe will be run through. Four of the lines will be 7 inches and two 9 inches. It will probably take about three months to make the change.

The following meteorological observations are furnished by the office of the U. S. Weather Bureau for the week ending July 31: Prevailing wind direction during the week, S.; highest velocity, 46 W., on the 29th; mean temperature for

week, 77; highest temperature, 92, on July 29; lowest, 68, on July 27. Sunrise and sunset data, computed for local time at Cleveland: Aug. 2, sun rises 4:53, sets 7:18; Aug. 5, sun rises 4:56, sets 7:14; Aug. 8, sun rises 4:59, sets 7:11.

Mr. Harry Rodgers who is well known in steamboat and railroad circles has accepted the position of general freight agent of the Cleveland & Buffalo Transit Co. Mr. Rogers held that position until five years ago when he resigned to go with the B. & O. railroad as commercial freight agent. The change will take place Sept. 1. Before the C. & B. line was started Mr. Rodgers was freight agent for the D. & C. line, under the successful tutelage of Mr. T. F. Newman, general manager of the C. & B. line and president of the Great Lakes Towing Co.

It is asked in down town offices why the Modoc whistle of the fireboat should so frequently be brought into use. It appears that the fire chief has established a code, principally to warn the crew of the viaduct bridge and incidentally himself, according to the following system: One long blast, fire on the east side; one long and one short, a warning to the viaduct that apparatus may be required from the west side; three long blasts, fire to the west or south; three long and one short blast notifies the viaduct crew that apparatus will probably pass from east to west and must be given the right of way.

What is known as the "Fordyce Contract," upon which Cleveland capitalists are promoting the Miami & Erie Canal Transportation Co., has been made the basis of certain reflections against prominent state officials and the promoters of the company. The newspapers in the southern part of Ohio have been serious in their denunciation of the grant, most of them basing their charges upon the idea that the Governor and Attorney-General had given the Miami & Erie canal to Fordyce for the construction of an electric railroad through to Toledo. Cleveland officers of the Miami & Erie Canal Co. have made an emphatic denial of the charge that they are attempting to steal the canal bank for an electric passenger business. Any attempt in this direction would be at the jeopardy of their franchise. The company has been organized and its bonds underwritten on the sole representation that it was to engage in the business of towing canal boats.

## FLOTSAM, JETSAM AND LAGAN.

The steamer Simon J. Murphy, which has been under charter to the Coastwise Steamship Co. of Newport News and New York, has been sold to the M. S. Dollar Co. of San Francisco, and will soon leave for the Pacific.

The story that the steamer City of Louisville has been sold by the Harts of Green Bay is denied. They have, however, sold for \$7,000 the steamer C. W. Moore to Chicago parties, who intend to run her on the Chicago-Benton Harbor route in the passenger and general carrying trade.

The Lookout, in the Daily Commercial News and Shipping List, San Francisco, is accountable for the following: "Woman" remarked the cynic "needs disciplining. If I had a wife she would get a sound spanking every little while." "You would have to do it behind her back," indignantly protested a young lady listener. "Of course, where else should I?" was the imperturbable answer.

In advocating the change of terms port or starboard to left and right, the New York Marine Journal says "we can see no reason why the change should not be popular with mariners of all nations. We take it for granted that every one—landsman as well as seaman—knows what right or left means, and for those who first start on a sea career it makes two exclusively sea terms, "port" and "starboard," easily understood when left and right are used in the stead. We are living in an age of advancement and improvement. There is no good reason for clinging to old-fashioned terms and conditions on shipboard when they can be simplified and better understood through a more apt application of language or invention." This is along the lines of the ideas of the naval freak who wanted to change the compass terms so as to number from N to 360° around by East. The only shipshape notion expressed therein was in going around east about, though to complete the freakish innovation the advocacy might have been to reckon left handed, and west about, or from the South polar point East about. The Marine Journal should know better than to attempt to make sailors into landsmen, or vice versa. Steering as used in the pilotage of narrow waters is as frequently indicated by hand motion as it is by word of mouth. Instance, a dialogue between deck officer and helmsman. "Is your wheel left? no sir it is right, ah? right is not right I want it left; he leaves it, etc.



**NEW AGENTS IN MINING DEVELOPMENT.**

Compressed air, electricity and fuel oil are the three agents most recently introduced into our mining development, remarks the San Francisco Chronicle. Compressed air has been in service ever since the diamond drill was invented. It has been a great labor-saving agent and an important factor in the economies of mining since its introduction. Its field has, however, been confined until recently to the purpose for which it was first applied. Latterly, however, the sphere of its usefulness has been broadened. In France it has taken the place of the steam hoist for raising the ore to the surface. Pneumatic tubes bring up the rock from the lower workings and deliver it at the shaft's mouth. Its use for a similar purpose in the deep mining operations of modern times has been discussed in this country, in Australia and South Africa as the most effective means of overcoming the problem involved in the breaking limit of cables and the lifting power of ordinary hoisting machinery.

In the Kern river petroleum districts compressed air is being applied to the wells to lift the oil to the surface where pumping is necessary. More or less of the sand composing the measures accompanies the oil to the surface and is exceedingly destructive to pumps. When the oil is forced to the surface by compressed air this grit is perfectly harmless. The oil is ejected from the well without coming in contact with anything which the sand contained in it can grind in transit.

Crude oil is now furnishing many of the mines on the mother lode with cheap fuel, as a substitute for the cord wood drawn from the forests of the Sierra, on which these properties have relied hitherto. It is also being used for the same purpose at the Keswick smelters, and will, doubtless, be the fuel which will be employed by all similar establishments hereafter erected in this state.

Of late years electricity has become an active agent in the economical working of most of the principal mining properties in the California mineral belts. Of all these new agents it is the one in most varied employment. Wherever the water power is obtainable for its generation it is being devoted to mining operations. Several extensive plants have been in active operation for some years furnishing power and light to drive mill and mine machinery and illuminate the surface buildings and underground workings. The transmissibility of this agent makes it available anywhere, and in many cases it is being employed in mines which are situated scores of miles from the point of its generation. We have thus found through it a means of turning to profitable account the unlimited and inexhaustible source of power contained in the water shed of our mountain ranges. Two large plants, which will supply a combined force of about 15,000 horse power, are now in course of construction near the base of Shasta. These within a year will be serving the mining interests of that section.

**QUICK PASSAGES UNDER CANVAS.**

The arrival of the Muskoka, the winner of the race which is reported to have taken place from Portland, Ore., to the United Kingdom, recently, serves to remind us that the days of quick sailing are not yet ended, says the London Shipping World. In the friendly test of skill which has just been concluded the competitors were the North German Lloyd's cadet training ship, the H. S. Charlotte, the Glasgow ship Marion Light and the Glasgow ship Ardenraig. The winner, under the command of Capt. Crowe, made the run from Portland to Queens-town in 101 days 20 hours. Satisfactory as this latest sailing record is, it pales before the doings of some of the old-time "cracks," many of which also performed their speedy voyages with almost clocklike regularity. The Donald McKay, the celebrated "Black Ball" liner, was not only the longest clipper in the world, but was also accounted one of the fastest sailers ever built. Upon one occasion she took 1,000 troops from Portsmouth to Mauritius in 70 days, and her average time for six consecutive voyages from Liverpool to Melbourne was 83 days, and only once it exceeded 85 days.

The details of the famous race between the three China tea clippers in 1866 are too familiar to need mentioning here, but the fact that a speed of over 15 knots an hour has been made by a sailing ship may not be so well known. The British clipper ship Hurricane during the course of one of her voyages home from Melbourne attained this

rate of sailing on several days, her best run being 270 knots in 16½ hours. But it was after the '60's, and indeed well on into the '70's, when some of the best sailing records were made. And it is doubtful whether the performance of the Sir Lancelot, when she covered 14,000 miles in 89 days against the prevailing monsoon, has ever been equalled; certainly there are no authentic statements to show that it has been surpassed. The voyage was made in 1859, from Foo-Chow-Foo to London, and her best day's run was 354 statute miles, while crossing the Indian ocean, the average for one week being 300 miles a day. This was essentially a voyage under adverse conditions. Perhaps the fastest passage between England and China was that made in 1857, when the celebrated American clipper Pride of the Ocean did the run out from the Lizard to Hong-Kong in 69 days.

**SHOULD NOT ENCROACH OR POACH.**

For some time past, says the Sarnia Post, complaint has been made that American fishermen have been in the habit of setting their nets in Canadian waters, beyond the line of pound nets used by Canadian fishermen, which seriously interfered with the catch of fishermen on this side. Fishery Inspector Stead and Chief Sarvis took a trip up the lake Friday on the tug Eagle to investigate, and succeeded in gathering in four or five miles of net, as well as a big supply of fish. The fish were sold to the captain of the tug. The nets are now at Point Edward in charge of the inspector. The particulars have been reported to Mr. Bastedo, Ontario commissioner, and Mr. Stead is awaiting instructions as to the disposal of the nets.

**MORE WATER POWER—LAKE SUPERIOR.**

TO DIVERT KAMINISTIGUIA RIVER.

There is another big power monopoly which will soon have its lobbyists at the Parliament Buildings. It aims to lock up in the hands of a syndicate the water-power northwest of the town of Port Arthur. The capitalists behind the scheme figure out that on the completion of the Canada Northern, Port Arthur will become a great flour milling centre. They have in consequence set to work buying land for a canal twenty-two miles long to connect with and divert the Kaministiquia River. There is said to be an easy route between the high levels to a point 3½ miles north of Port Arthur, where the syndicate propose constructing a reservoir with an area of 1,500 acres. When the route has been secured it is not expected that much influence will be required to secure the water-power of a river in West Algoma being quietly conceded by the Ontario government to a company if the negotiations are properly engineered, in view of the ease with which various corporations secured that of the Niagara Falls.

It is expected to be ripe for the concession to be granted, and the names of the favored syndicate to be published in an incorporation proclamation, by the time that Premier Ross gets back from his trip to England.—The Toronto World.

**MONTHLY REPORTS ON DOMESTIC COMMERCE.**

Leading movements in the domestic commerce of the United States are now being made the subject of monthly reports by the Bureau of Statistics of the Treasury Department. An idea of this feature of the Bureau's work may be obtained from the fact that incorporated in the April Summary of Foreign Commerce are a hundred tables showing commercial movements at interior cities, traffic on the Great Lakes, receipts at the Atlantic seaboard, trade movements in the Southern States and on the Pacific coast, and shipments of coal, coke, petroleum, and other mineral products in various parts of the country. In many cases comparisons are made between the transactions during the four months of the calendar year 1901, and similar transactions during the same period in 1901. Attention is also called to the broadening basis of internal commerce consequent upon the conversion of vacant lands into farms in the Northwest and recent mineral developments in the Southwest, which sections are receiving a large influx of population.

The old wooden frigate Minnesota, built at the Washington Navy Yard in 1855, and among the largest vessels of the old navy, has been stricken from the navy list and advertised for sale. She is at Boston, where she has been used for some time as an armory for the Naval Militia of Massachusetts.

**MISSISSIPPI RIVER COMMISSION.**

The annual report of the Mississippi river commission has been received by the chief of engineers. This commission has charge of the work of improvement from Cairo to the passes. The sundry civil act of 1900 appropriated \$2,250,000 for the work, which with the exception of \$25,000 has been allotted for the levees dredging, revetments, repairs, surveys and materials, all of these being included in the plan of improvement. The report says that the failure of the last congress to pass the river and harbor bill, makes it incumbent to repeat the recommendation of the last report for continued appointments. It also states that having no appropriations, "there are in several districts a recast and careful husbanding of the balances from the several allotments and their application to objects which might suffer if neglected. The commission can operate the dredgers if such a period should develop." The report says: "The balances for levees, their enlargement and extension are in most cases entirely exhausted, while the aggregate of such as remain is wholly insufficient to meet an emergency such as developed in 1897."

The committee report on the levees says that "Although steady progress has been made during the year by the co-operation of the government and local authorities, there are parts of the line in each district which are yet dangerously deficient in grade and sections," also, "there are in several districts levees of great importance in danger of caving in in the very near future from their proximity to the river bank."

Those regarded as most dangerous are:

Birth's landing, White River district; Stop Landing, Lower Yazoo district; Lake Providence, upper Teusas district; Hard Times, Bonclurant and Kempe, lower Teusas district.

The commission recommends that an appropriation of \$3,000,000 annually be made for six years and that \$695,000 be appropriated for special work at different points.

**COMPLIMENT TO A NAVAL OFFICER.**

The "Journal de Debats" (Paris) of June 11 has a notice of the "Treatise on Electromagnetic Phenomena and Compass Deviations," by Comdr. T. A. Lyons, U. S. N., published by John Wiley & Sons, New York, of which the following is a translation:

"This work is intended to present in an elementary form the most recent theories of modern physics. Because of the delicacy and complications of the energy and vibrations of the ether of space, theories concerning these have not yet acquired a place in courses of instruction; but we have never found the varied movements of the ether—radiant energy—and their relations to electric and magnetic phenomena on the surface of the earth explained more clearly, stripped of all superfluous mathematical entanglements, than in this book. The first volume, which is the only one thus far published, ends with a beautiful exposition of the electromagnetic theory of light. In the second volume the author proposes to apply the theoretical conceptions of the first volume to the practical determination of the deviations of ships' compasses. When one considers the number of vessels at present engaged in commerce, the immense size of some, the wealth in merchandise they carry, and their human freight, one can appreciate the importance of a treatise of this kind and the immediate practical advantages it may have for the better utilization of human activity."

This is a very gratifying tribute to the work of one of our navy officers, which deserves serious attention from all who are interested in the subjects discussed. It will be remembered that Commander Lyons was for four years (1881-5) Superintendent of Compasses in the Bureau of Navigation.—Army and Navy Journal.

DIRECTOR CAMPBELL, of Lick Observatory, San Jose, Cal., places no faith in the theory advanced by some eastern astronomers, that extraordinary weather conditions in the middle west are due to solar causes. Prof. Campbell said in his opinion they are due to local and earthly causes. "I do not connect weather conditions with solar disturbances. The spots on the sun are about at their minimum intensity. They endure or manifest themselves in a cycle of about 11 1-10 years. They will be at their maximum at about 1905 or 1906. Heretofore great heat has occurred at the period of the maximum of these spots, but there is no significance whatever to be attached to these incidents."



PRODUCTION OF COAL.

The States producing the most coal last year were: Pennsylvania, 136,723,006 tons (57,107,660 anthracite and 79,616,346 bituminous), valued at \$160,159,629; Illinois, 25,153,929 tons, valued at \$22,529,665; West Virginia, 21,980,430 tons, valued at \$17,698,734; and Ohio, 19,105,408 tons, valued at \$19,403,362. The production in no other State or Territory amounted to 10,000,000 tons.

West Virginia showed the largest increase in tonnage, the production exceeding 20,000,000 tons for the first time. The next largest gain was an increase of 2,605,138 short tons in Ohio. The net gain in Pennsylvania amounted to 2,150,000 short tons. Alabama gained 800,000 tons, or 11 per cent. The most notable comparative gains were made in Arkansas, the Indian Territory, Michigan, and Utah. Kansas increased its production 600,000 tons, or 16 per cent. and Kentucky 575,000 tons, or 12 per cent.

Before 1899 Great Britain was the leading coal-producing country of the world, but in that year the United States took first place. The production of Great Britain in 1900 amounted to 225,170,163 long tons, or 252,190,573 short tons, compared with which the United States has a lead of 15,300,000 short tons, or just double that of the preceding year.

Official reports show that the year 1900 closed the century with the largest coal production ever recorded in the United States and continued the supremacy of the United States among the coal-producing countries of the world. Practically complete returns to Edward W. Parker, statistician of the United States Geological Survey, show the total output of coal in 1900 to have been 267,542,444 short tons (2,000 pounds), an increase over the preceding year of 13,802,452 tons, or a little more than 5 per cent. The value of this product was \$297,920,000, an increase of 16 per cent. over 1899. Coal producers felt a much greater benefit from the improved trade conditions in 1900 than in either 1898 or 1899. Coal contracts are usually made for future delivery, sometimes more than a year ahead, and much such coal was delivered in 1899 at less than its cost to produce it, the price of labor having advanced before the operators could advance the price of coal. The value of the coal product in 1900 (the value being free on board cars at the mines) was equal to nearly one-third of the value of the total mineral product of the United States in 1899.

WILL NIAGARA RUN DRY?

FRANCIS WAYLAND GLEN IN NEW YORK SUN.

"Will Niagara run dry?" In reply I beg to say no. Why? First—Because when the Georgian Bay and Ottawa river canal is constructed with 25 feet of water over the lock sills the waters of Lake Nipissing, Trout Lake and Lake Talon will discharge into Georgian Bay and, therefore, raise the water level of Lake Huron. Trout Lake is 300 feet deep, and is fed by the perpetual snow and ice of the upper part of the valley of the Ottawa.

Second—A canal can be cut from Lake Nipegon to Lake Superior. Nipegon is a large and deep lake and is also fed from many streams which rise in the region of perpetual snow and ice.

Third—When a ship canal is constructed from Lake Superior through Rainy Lake and Rainy river to the Lake of the Woods, another large body of water would discharge into Lake Superior. These three sources of supply will more than counterbalance the discharge of water through a ship canal from Chicago to deep water upon the Illinois river.

The Canadian government is protesting against our building the Chicago drainage canal, although Lake Michigan is entirely within United States territory. If Canada has any rights in Lake Michigan which we are bound to respect, then we have rights in Georgian Bay which Canada is bound to respect.

We have the same right to protest against her constructing a ship canal from the Georgian Bay to Montreal for the admission of war vessels into the upper lakes that she has to object to our constructing a canal from Lake Michigan through the Illinois river for drainage purposes.

The Hon. Andrew H. Green, with his usual foresight, has been urging the creation of an international commission for the purpose of dealing with international waters, and also for the purpose of suggesting a continental system of international deep-sea canals.

There is no more important question for the electors of this republic than the creation of that commission.

THE HEAVENS IN AUGUST.

Astronomical data for August, 1901, furnished the MARINE RECORD by the Washburn observatory:

Mercury is a morning star the early part of the month and reaches greatest elongation west Aug. 2d. The planet will be favorably situated for observation during a week or more following, rising an hour or more earlier than the sun and from nearly the same point of the horizon as the sun. Venus continues to be the evening star, appearing higher above the western horizon each evening, and increasing in brightness. Mars is getting too low for favorable observation and sets in the middle part of the evening. Jupiter is the most brilliant object later in the evening sky, excepting the moon, and is seen almost directly south. It is followed by the far less brilliant planet Saturn, somewhat east and a little north of Jupiter.

The times of sunrise and sunset at Milwaukee for the month are as follows:

	SUNRISE.	SUNSET.
August 1.....	4:41.....	7:14.....
August 11.....	4:52.....	7:01.....
August 21.....	5:03.....	6:46.....
August 31.....	5:14.....	6:29.....

The times of the moon's phases are:

Third quarter.....	August 7.....	2:02 a. m.
New Moon.....	August 14.....	2:28 a. m.
First quarter.....	August 22.....	1:52 a. m.
Full Moon.....	August 29.....	2:21 p. m.

The principal fixed stars visible in the evening hours during the month are: To the West, Arcturus and Antares; near the Meridian, Vega; to the East, Altair.

EASTERN FREIGHTS.

Messrs. Funch, Edye & Co., New York, report the condition of the eastern freight market as follows:

We regret we cannot report any improvement in grain freights, in fact the conditions are even worse than anticipated. The continued fluctuation in the price of cereals operates against shippers transacting new business and with the number of prompt steamers pressing on the market, freight rates had to give way. A prompt steamer has just been closed at 18 9d per quarter on berth terms to Rotterdam and this figure is all that shippers are inclined to pay for tonnage, even for first half of August loading. Until the quantity of available tonnage is considerably reduced, we cannot hold out any prospect of an improvement. There has been a fair amount of charters effected for general cargo from the gulf, but they are principally for September and the later months, and the rates accepted show a decline on previous fixtures. Timber charterers continue to show little disposition to take up further tonnage, excepting at their own figures. A few charters have been made for deals from the British Provinces, but in this case also owners have had to make some concession in the rates.

With the exception of a few charters for case oil to the far east, at rather easy rates, and a few charters for lumber to South America, the market shows but little activity, and we can only say that on the whole the situation remains unchanged.

STATEMENT OF THE VISIBLE SUPPLY OF GRAIN.

As compiled by George F. Stone, Secretary Chicago Board of Trade, July 27th, 1901.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY Bushels.
Buffalo.....	1,133,000	772,000	807,000	44,000	75,000
Chicago.....	3,858,000	6,813,000	870,000	146,000	1,000
Detroit.....	239,000	64,000	2,000	12,000	3,000
Duluth.....	1,885,000	1,722,000	768,000	84,000	42,000
Port William, Ont..	675,000	.....	.....	.....	.....
Milwaukee.....	370,000	593,000	55,000	10,000	16,000
Port Arthur, Ont....	62,000	.....	.....	.....	.....
Toledo.....	406,000	535,000	68,000	59,000	.....
Toronto.....	36,000	.....	1,000	.....	.....
On Canals.....	116,000	34,000	227,000	.....	.....
On Lakes.....	1,296,000	352,000	203,000	9,000	.....
On Miss. River.....	70,000	.....	.....	.....	.....
Grand Total.....	29,264,000	13,387,000	5,667,000	558,000	308,000
Corresponding Date, 1900.....	46,354,000	11,692,000	5,693,000	557,000	518,000
Increase for week..	1,583,000	145,000	.....	125,000	.....
Decrease " ".....	.....	.....	674,000	.....	33,000

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.

THE British bark Calcium has started on her second voyage this season to Greenland, where she will load a cargo of cryolite.

SHIPPING AND MARINE JUDICIAL DECISIONS.

(COLLABORATED SPECIALLY FOR THE MARINE RECORD.)

Error in Extremis.—Where one vessel has clearly been guilty of a statutory fault, which is sufficient to account for a following collision, she cannot charge the other vessel with contributory fault, except on clear evidence. An error in navigation, when in extremis, is not sufficient. The North Star, 108 Fed. Rep. (U. S.) 436.

Construction of Phrases.—The phrases "free of particular average," and "free of any claim for damage or partial loss," in a policy of insurance of a cargo of produce on a canal boat, have the same meaning,—that the underwriter is liable only for a total loss. Devitt vs. Provident Washington Ins. Co., 70 N. Y. Supp. 654.

Contributory Fault.—The fact that the lookout of the Siemens was not at his post at the time the Star's first signal was given, while a violation of the rules, was not a fault contributing to the collision, in view of the fact that the Star persisted in attempting to pass after the subsequent dissenting signals of the Siemens. The North Star, 108 Fed. Rep. (U. S.) 436.

Insurance—Policy—Construction—Total Loss.—Where a cargo of produce on a canal boat insured "free of any claim for damages or partial loss" was so damaged that the gross proceeds of the sale of the portion saved equaled only one-fourth of the value when insured, the loss was a constructive total loss, for which the insurer was liable. Devitt vs. Providence Washington Ins. Co., 70 N. Y. Supp. 654.

Negligent Discharge of Cargo.—Where a bill of lading consigned a canal boat alongside of a steamer for the purpose of transferring a cargo of iron from the canal boat to the steamer, and the iron was properly put in slings in the hold of the canal boat, and two of the loads fell, from contact with the side of the ship, because there was no guy to control the slings in rising, the canal boat was not liable for the resulting loss. Vincent vs. Hogan et al., 108 Fed. Rep. (U. S.) 428.

Collision—Navigation of St. Mary's River—Rules Governing.—The special rules governing navigation in St. Mary's river, approved by Act March 6, 1896, take precedence of all general rules, where they apply, while, as to matters not covered by them, the general rules for navigation on the Great Lakes, embodied in the White law of February 8, 1895, and those promulgated pursuant to its provisions, govern. These statutory rules are mandatory, and evidence of prior usages and customs cannot justify their violation, but a vessel which disregards them must show, in case of collision, that their violation not only did not, but could not, contribute to the disaster. The North Star, 108 Fed. Rep. (U. S.) 436.

Injury to Vessels at Wharf—Storm.—A steamer came up to her usual berth at a dock during a gale and storm, and, owing to the failure of the wharfinger to make fast her stern line in time to prevent it, she was swung around by the wind, striking and injuring a wharf boat which was moored in the same slip, and crushing an electric launch which was tied up to such boat. It appeared that the line was thrown promptly and the wharfinger acted with reasonable promptness, and that the engines were promptly reversed, but there was not time to make sternway before the ship swung so far that she could not go astern without striking the opposite wharf. Held, that, even with the presumption against her as the moving vessel, it could not be found, on such facts, that there was any want of ordinary care or skill on the part of her officers or crew which rendered her liable for the collision, but that the real cause of the accident was the violence of the storm. The City of Aberdeen, 107 Fed. Rep. (U. S.) 996.

Marine Insurance—Construction of Policy—Effect of Rider.—The charterer of a vessel, which it employed in the carrying business, took an open cargo policy for \$5,000, containing the provision, "but no damage to be paid unless amounting to five per cent." By a rider it was provided, "Warranted free from particular average under five per cent, each kind of goods and each bill of lading interest subject to separate average." Held, that the effect of such rider was merely to change the liability of the insurer with respect to what should be deemed a partial loss thereunder, by making the five per cent provision applicable to each kind of cargo and each bill of lading interest separately, instead of to the cargo as a whole, so that liability attached in case any one species of cargo or bill of lading interest suffered damage to the extent of five per cent, but extending only to such species or interests which sustained damage to that extent; but that, a loss under the policy having been ascertained, the amount to be paid by the insurer must be determined by the usual rules applicable to marine policies, the same as would a loss on an entire cargo, if the rider had been omitted; the insured standing as his own insurer to the extent of the value of the cargo above the amount of the policy, and sharing a proportionate amount of the loss on each part. Chicago Ins. Co. vs. Graham & Morton Transp. Co., 108 Fed. Rep. (U. S.) 271.





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IT IS not considered good seamanship to lay one vessel alongside of another in a gale of wind with a heavy sea running. Communication is usually opened by other methods, and this applies to steam equally as well as when vessels are under canvas.

So! Shamrock II is now on her way across the Atlantic to "lift the cup" having left the Clyde on Saturday last. Both the Constitution and the Shamrock have been tried out, and no doubt exists but that each craft represents the highest skill in naval architecture of this class, which either country can produce. They are also being handled in a masterly manner, given everything that can accelerate their motion through the water, and all indications point to a thorough trial of construction and test of speed. So, may the best boat win.

MUCH practical information in the elucidation of nature's workings may be expected from the Congress of weatherologists, which convenes in Milwaukee, Wis., on August 26th. The present Chief of the Weather Bureau is entitled to the thanks of the community for this annual bringing together of a majority of the professionals engaged in studying the science of meteorology. It is by such means that the film of uncertainty regarding weather prognostications may be obliterated, and the predictions made, be more generally understood, and, as a consequence, popularized, according to the comprehensiveness of the ordinary layman.

It seems quite an innovation to advocate the change of words as used in the steering code on board of vessels. The custom hitherto has been to use the terms port and starboard as though the prefix avoid was attached or connected with the order, that is, port, meant avoid port, not go to port, and the same sense applied to the sister term starboard. The North German Lloyd and the Hamburg-American lines for some time have been using the terms "port" and "starboard" in their literal sense, i. e., when it is desired that the vessel's head shall be turned to port the word "left" is given; when to the starboard the order to the wheelsman is "right." This in accordance with the ruling of the German Emperor in naval conduct. A general meeting of the merchant vessel owners in Germany was held recently, at which it was resolved at a date in the near future to adopt the use of the words right and left in place of port and starboard. While it is possible that the new phraseology may become universal in so far as steering orders are concerned, it will be a great wrench for the present generation to emit such soldierly-like sounds. But then, all sailors are more or less soldiers, with the accent on the more these times.

## MEDALS FOR LIFE SAVERS.

The Lake Carriers' Association, as the most influential body of men connected with the marine industries of the lakes, has the opportunity to round up the reason of its being by taking direct cognizance of acts of signal bravery accomplished by those in their employ. One of the ex-presidents embodied such a departure in his annual report, thus calling the attention of its members to the best side of the innovation, and pointing out, how, by this means, a spirit of emulation might be engendered among all classes sailing on the lakes when the question of saving life and property had to be exercised momentarily and influenced by innate heroism.

There is no doubt but that a certain voluntary, vigorous spasm of bravery is manifested among men when the knowledge is entertained that the risk to health, limb or life will meet with some adequate sort of recognition in the event of their supreme physical or skilled efforts being successful in the immediate or particular adventure embarked upon. The bare, simple operation of mustering a crew and calling for volunteers to man a boat in a sea-way, with the object of rescuing life or aiding property in distress is a Hobson proceeding which, after the flurry or need of such a request is over merits a greater or less degree of recognition, according to the circumstances of the case, results involved, etc., and we are strictly within the bounds of exact truth in stating that there are hundreds of deeds occurring each year and throughout the season of navigation on the lakes, far surpassing in point of valor, heroism and bravery, as well as successful accomplishment, the late sinking of a hull in the gut, channel, fairway or entrance to Santiago Bay; yet, beyond the bare mention of such as a news item in the press, no further action is customary or considered necessary, nor, as things go, even thought desirable.

We have introduced the word or name of Hobson in this connection more distinctly for its inclusiveness in describing our ideas regarding the recognition which such duplicate acts are entitled to at the hands of corporate bodies and private citizens associated to maintain the best interests of all that appertains to the lakes, including ordinary and ultra services rendered thereon. There is no intent to minimize or speak in any manner derogatory of the heroic inspiration which filled the breasts of the volunteer crew during their attempts to bottle up the fleet of Admiral Cervera. The do, dare or die aspect of their efforts called forth the recognition and thanks of every right-minded citizen of this great and glorious country. Such being the clear, unvarnished facts, it is our duty to advocate the adoption of measures which will eventuate in the bestowal of some public or private token of recognition to members of the lake marine on the exhibition of signal acts of bravery and heroism so frequently voluntarily performed without a shadow of thought of being recompensed in the slightest, or in fact, in any manner whatever.

Mr. Frank J. Firth, Philadelphia, ex-president of the Lake Carriers' Association, outlined the modus operandi which he thought best to observe in promoting this specially commendable feature. Evidently there is still some inertia to be overcome and perhaps it is along the lines of a lack of personal interestedness, or in other instances, the immediate pressure of business preventing personal efforts being put forth in this particular direction, even while candidly avowing the heartiest desire to see the system placed on a proper basis.

It has been found from the experience of the past quarter of a century that the act of Congress empowering the Treasury Department to make government awards in this direction, is, as usual, surrounded with a network of red tapeism almost rendering unworkable the mandatory desires of our legislators, proof of which is found in the sparse distribution of these medals metallic, as expressions of the nation's courtesy towards those of her braver and usually more skilled citizens in matters aquatic.

## ADMEASUREMENT OF VESSELS.

The Commissioner of Navigation is asked to rule upon a question of the British admeasurement of vessels wherein it is said to conflict with the American methods of measurement, the particular case being the White Star liner Bovic in relation to her shelter deck space. There is much to be said in favor of a general uniformity in the methods of measurement and an endless set of troubles may be inaugurated if the Commissioner of Navigation attempts to split hairs in defining clauses of customs regulations. He no doubt realizes to what an extent this disagreement may be

carried where vessels are compelled to carry several certificates of measurement. However, in the case of a lake-built vessel now in service we may quote a wide diversity in measurement, without, at this time, going any further into the matter. In the case in point we take the Government blue book issued by the Bureau of Navigation and the figures given by three American classification societies as follows, gross tons, 2,443, 5,580, 2,444 and 2,443, net tonnage 1,634, 1,635 and 4,134. Here is a case in point where no two authorities exactly agree, though evidently in two cases the figures have been taken from the Commissioner's blue book. However, Minnesota taxes are now only 3 cents per ton, and dry dock charges not being excessive, but little difference can be said to exist except in the one instance. It would affect licensed officers however, in the case of a license being made out for a 2,000 ton vessel, and the officer not being permitted to serve on a 3,000 or 4,000 ton craft.

## THE BATTLE OF BOILERS.

With the advent of the large, twin screw, steel steamers, North West and North Land, in 1894, the question of boiling was a most important one and exacted many anxious hours from those most nearly interested in the construction, handling and management of the largest and most expensive boats to be used exclusively for lake passenger service, types, tests and consultations were the order of the day until a final settlement was made on the adoption of the French type of tubulous boilers known as the Belleville, batteries of these much lauded steam raisers were placed in both of these 5,000 ton steamers and the success or otherwise of their workings has now passed into history, suffice it to say that the Belleville boilers are still retained in these splendid sister ships and to further remark that none others of the Belleville type have been installed in lake vessels since that time.

The next most positive and important departure was the adoption of the well known, highly tested and universally satisfactory type of water tube boilers known as the Babcock & Wilcox manufacture, these boilers placed in the largest steel steamers on the lakes, though built for the one syndicate of owners, appeared to be economical from every standpoint and with the addition of an automatic stoker left nothing further to be desired in the way of steam generators for lake use. During the time of construction of these, the largest fleet of steel cargo steamers now on the lakes, or we may say likely to be, for they are of the 500 foot class, the Babcock & Wilcox type of boilers commanded the closest attention of builders, owners and underwriters, also of the classification societies and it was at one time conceded that we had arrived at the acme of steam generating with the foregoing installation. Without in any way attempting to state conditions regarding the actual experience found from the use of this type of water tube boiler, we may say that their absence is somewhat noticeable in the volume of lake construction now under contract.

The next step regarding water tube boilers with which lake interests and industries are to be associated is the Niclausse type. Under this patent and form of manufacture there is now building at the Stirling Works, Barberton, O., two batteries, each containing sixteen boilers, for the two largest cargo boats ever put together in the United States, and, incidentally, for the same owners who had the temerity or enough of the originality to place the first named type on their exclusively passenger ships, but, with this distinction, the latter is intended for salt water service, while the former was solely for fresh water or lake use.

A government commission has been for some time past and is now, wrestling with the boiling subject in the United Kingdom, particularly for naval uses. The most talented skill and experience which this country can produce has been centered along similar lines during the past decade and the end is not yet. Under these conditions, class journals can but await the outcome of tests made by the most thoroughly competent and distinguished class of investigators which the several maritime nations can command, and, from the results of their deliberations, herald the facts accordingly.

That a certain type of tubulous boiler will demand a universal adoption, probably irrespective of the fuel used, seems to be generally admitted as a foregone conclusion and so keen is the best skill, experience and mentality now directed toward the discovery of this industrial philosopher's stone that the heralding of a successful combination of manufacture may be within the confines of the near future, if not already in partial use, or perhaps because of such.

With the national and international competition now



evidenced in the realms of shipping, the question from a public, as well as a private standpoint, as indicated between naval and merchant service uses, is one of momentous importance, never in the world's history has the time been so propitious for the advent of actual and marked economies in the transference or transportation of passengers, mail and merchandise over vast stretches of water. Someone has said that, "the seas but unite, the nations they divide", and very truthfully so, when the division is spanned by the best methods of communication that can be evolved by the practical and scientific workers known on the surface of this comparatively minute sphere. It is further recognized that one of the studs in the links of the chain connecting the divisions is to be found in the boiling of our ocean and waterborne messengers.

"BRAVO, DEUTSCHLAND! An excellent performance, heretofore accomplished by no other ship in the world. Honor to her builders! Honor to the oft-proved Vulcan yard! Honor to the crew! May both ship and crew carry their glory worthily over the seas. I rejoice that the ship is named the Deutschland."—Congratulatory Dispatch from the Kaiser. Now will the United States Congress vote measures for the upbuilding of the mercantile marine? The American eagle is worthily entitled to get a scream in here somewhere. Capsize the present governmental administration of the merchant service, vote liberal appropriations for mileage, tonnage and speed, and have the country placed in the front rank of maritime supremacy, where she belongs by virtue of every reason under the sun. Let the motto prevail, "No more dollars for investments in foreign built tanks." The men, means, material and money are available to outclass the world in the art of shipbuilding and sailing, again, and once more, as before.

THE exercise before breakfast in Manila Bay taught us but little in the science of naval warfare. It was a sort of a seven bell rally, then a spell off for coffee and a pipe of tobacco before putting the one-sided finishing touches upon a few obsolete, unmanoeuvred, quiescent hulls ready to sink at their moorings. Now we are being surfeited with a recapitulation of the hare and hounds chase which took place on the south side of Cuba, where, after all, it was a good deal like loosing a cage of rats among a kennel of bristling terriers. Nowhere afloat were the Spaniards worthy of what we brought against them. The naval duel between the Alabama and Kearsarge laid away over and above from every standpoint the entire Spanish-American imbroglio. For the past half century the naval power of Spain has never been worth powder enough to blow it away.

THE RECORD announced last week that Mr. James Playfair, Midland, Ont., had ordered a 3,000-ton steamer from Dundee builders, and that she was then loading at Manchester for Chicago, via Montreal. This fact has given rise to the report that it is intended to open a regular trade between Manchester and Chicago; such, however, is not the case. The vessel is bringing a cargo across for St. Lawrence ports, and then she will enter the lake trade. The moiety of her cargo consigned to Chicago will barely keep her down to ballast trim, and the freight received for carrying same will not add much, if any, "gilt to the gingerbread." The earnings will be on the cargo discharged before she enters the St. Lawrence system of canals. At Chicago she can load grain for Georgian Bay ports.

#### NEW STEAMSHIP COMPANY.

On June 16, 1901, the United States and South American Steamship Company, with a capital of \$1,000,000, was incorporated at Trenton, N. J. The incorporators of this line are identified with the Lamport & Holt Line of steamers, which ply between New York, Montevideo, Pernambuco, Bahia, Rio de Janeiro, Buenos Ayres, and Rosario, the vessels calling at Cabadillo, Maceio, Victoria, and Santos if cargo is offered. Its vessels are the steamships Coleridge, Buffon, Milton, and Sallust, the first two carrying first and third class passengers.

MESSRS. DEGRAUW, AYMAR & CO., New York, announce that they are again in a position to fill all orders for J. Hoth's best make of Russia bolt rope. As this well and favorably known specialty has been out of the market for some time past there will no doubt be many of our readers accustomed to handle this brand who will be pleased to learn that it is again procurable.

#### SHIPBUILDING IN THE FISCAL YEAR 1901.

Vessels built in the United States and officially numbered by the Government Bureau of Navigation during the fiscal year ended June 30, 1901, number 1,173, of 401,289 gross tons, compared with 1,058, of 305,677 gross tons, for the previous fiscal year. Unrigged barges, canal boats, etc., will add 88,331 tons to this total. Such constructions in the preceding year aggregated 76,186 tons. The whole tonnage built has been exceeded only twice in the history of the country, the maximum having been attained in 1854 and 1855, with 583,450 tons.

Excluding unrigged barges and canal boats, three-fourths of the new tonnage is comprised in 111 vessels, each of over 1,000 gross tons. To these large vessels the Great Lakes, where steel ship building in the past few years has been highly developed, contributed forty steel steamers, of 137,312 tons. This tonnage exceeds the steel steam product of the entire United States for any year before 1899.

The ocean steel steamships built on the seaboard were 15, of 70,667 gross tons, to which may be added 9, of 18,888 tons, all small, built on the Great Lakes for salt water traffic.

#### LAKE FREIGHTS.

Iron ore is still paying the steady opening rate on the 80-cent basis from the head of the lakes, 70 cents Marquette and 50 cents Escanaba. Charters are freely offered on these terms. The present indications foreshadow a total of 19,000,000 tons for the season's work.

There is an effort evidenced to get coal along to Milwaukee, and on this account a 50-cent rate is again being looked for, 40 cents is the going rate to Lake Michigan ports, and 35 cents to the head of the lakes, with fairly brisk shipments, though up to this time last year 230,000 tons more had gone forward from Buffalo alone.

Grain cargoes are not quotable and what little has been shipped during the week was on the basis of 1½ cents on wheat from Chicago, with 1¾ cents offering and taken on corn, but vessels changing ports rather than accept the reduction on wheat; a better market is looked for next week. Duluth is nominally quoted at 2½ cents on wheat.

Lumber rates have steadied at \$2.50 from the head of the lakes and a large fleet is now headed that way. It is reported that the L. S. & M. S. Co. chartered one cargo for Chicago at \$2.37½, but the higher rate is steady for Lake Erie ports.

#### U. S. LIFE-SAVING SERVICE.

The Life-Saving Service has grown since 1849 from ten stations, depending upon volunteers, to 269 stations with adequate equipment and regularly employed crews, protecting a coast line of 10,000 miles. There are 194 stations on the Atlantic coast, 58 on the Great Lakes, 16 on the Pacific and 1 at Louisville, Ky., at the falls of the Ohio river. The Atlantic coast stations are in operation all the year around save in June and July. On the Great Lakes the stations are open during the season of navigation, usually about eight months. On the Pacific coast they are always in operation. On the Atlantic coast the stations are manned by a keeper and seven men each. On the Great Lakes and on the Pacific coast, where the self-righting boat is in use, there is one more man to each station. The men receive \$65 a month. Keepers are paid \$900 a year.

#### LLOYD'S SHIPBUILDING RETURNS.

The figures given in Lloyd's Register shipbuilding returns for the quarter ended June 30, 1901, show that British shipbuilders were engaged at that date on the construction of 441 merchant vessels, aggregating 1,300,179 gross tons. These figures show a decrease in the tonnage under construction of about 3,000 tons as compared with the figures for last quarter, but, as compared with the corresponding period of 1900, they read roughly 35,000 tons higher. Compared, however, with the "record" quarter, December, 1898, the total on June 30 last is no less than 101,000 tons below that standard. Of the vessels now under construction, 350 averaging 3,714 tons each, or 1,051,342 tons in all, are building for British ownership, and 91, averaging 2,765 tons, or 248,837 tons in all, are for foreign owners, Holland being the best customer with 8 steamers, aggregating 50,770 tons, in hand. Austria occupies second place in these returns with 12 steamers, and 35,820 tons, while Germany, which for some years has generally headed these lists, now takes third place with 7 steamers and 2 sailers, or 9 vessels of, in all, 31,064 tons.

#### A LAKE SUPERIOR COLLISION.

The whaleback tow barge Sagamore, Capt. E. Joiner, loaded with iron ore, was sunk through collision with the Northern Queen, Capt. J. F. Vaughn, in a fog off Point Iroquois on Monday last.

The Sagamore foundered in about 12 fathoms and is abandoned by her owners as a total loss. The captain and Ira Ives, cook, lost their lives. The Northern Queen proceeded on to Duluth after making temporary repairs at Sault Ste. Marie.

The Sagamore was a steel barge of 1,601 gross tons, built at West Superior in 1892, owned by the Huron Barge Co. (Pickands, Mather & Co.), rated A1 and valued for insurance purposes at \$80,000, fully insured with Johnson & Higgins companies, New York.

#### LETTERS AT DETROIT MARINE [POST OFFICE

JULY 31, 1901.

To get any of these letters, addressees or their authorized agents will apply at the general delivery window or write to the postmaster at Detroit, calling for "advertised" matter, giving the date of this list and paying one cent.

Advertised matter is previously held one week awaiting delivery. It is held two weeks before it goes to the Dead Letter Office at Washington, D. C.

Barron T. D., Wyandotte	Lester Alfred, Eureka
Bonnan Wm., Rees	McLaud Dan, Wawatam
Butler J. L., Briton	McForan Jos., Yukon
Bailey Will, J. B. Ketcham	McMillan Jno., Palmer
Blackman Paul, Rochester	Miller R. E., Wilbur
Butter J. L., 2 McDougall	Miller W. G., Fulton
Babcox A. K., Mecosta	Mulligan Hugh, Wallula
Byrens Thos., Decota	Miller Jas., Athens
Boushey Frank	Morrisson J., 2 Appomattox
Brake B. R.	Neal Jas. W., Hudson
Bradley Wm.	Nasbit C. J., Sawyer
Clark Thos., Chattanooga	Pringle Mrs. R. C.
Collins Omar D.	Parish Jno.
Cane Phil	Peterson Peter, Howard
Cook Geo.	Palmer Chas.
Cotton Anna	Sanscrainte L. P.
Chrisman Edw., Stephenson	Schroder H. J., La Salle
Drew Michael, 2 Vanderbilt	Stedman F. H.
Donaldson Wm., Glidden	Smith Thomas, Harvard
Edson E. J.	Smith Fred, Harper
Farrell Geo., Stephenson	Sterey J. E., 3 128
Fry James, 109	Sherman Lee, Viking
Gunderson Chas.	Southon James, Rochester
Gustafsson Gus, 2 Athens	Sheehan H. J., Rees
Hopkins Bert, Rochester	Thompson J. B.
Haynes Chas.	Theobald W. E.
Hamlin Alfred	Visger Byron
Henderson Capt. James 2	Wagner Joseph, Gates
Harrison Clyde, Colby	Worden H. C., Minneapolis
Huelsmann Levy, Presque Isle	Warren Mattie
Irving Will, Oglebay	Williams C. M., Quito
Jean Capt. Tom	Welch Mrs. Geo., Rees
Kersten W. C., 2 J. T. Hutchin-	Worden F. A., 2 Penobscot
Kuhlman H. F., Nicholas	son Welch Jno., Donaldson
Kenyon G. R.	Wilson James
Keiller Will, Farwell	Williams Ellen, Miner
Lafontain Telmond	Young Rufus 2
Lennon Frank, Tampa	Young Jno. H.

F. B. DICKERSON, P. M.

Shipping—Vessels Moored to Others—Liability for Negligence.—Two scows owned by libelants were moored to the breakwater in Erie Basin by strong lines, which were sufficient to withstand any strain which such vessels would have put upon them had not the three respondent scows moored to them on the outside. The following morning the wind was high, and there was danger of the vessels breaking away, but the masters of respondent scows took no measures to assist in strengthening the fastenings. The masters of libelants' scows called out to them of the danger, but their suggestion was unheeded, and beyond that they did nothing. The lines finally parted and libelants' scows were drifted against other objects, and sunk. Held that, while the action of respondents in tying up to the other scows was lawful, and in accordance with the custom of the port, it was their duty, when the safety of all the vessels required it, to put out lines to assist in making them secure; that it was also the duty of the masters of libelants' vessels, having knowledge of the danger, and that nothing was done by the outlying scows, to use some diligence to strengthen their lines for the protection of their own vessels, and that the damages should be divided, one-third to be borne by libelants and two-thirds by the outlying scows, as between themselves to be divided equally. The No. 6H, 108 Fed. Rep. (U. S.) 429.

Overtaking Steamers—Attempting to Pass in Violation of Rules.—An overtaking steamer, attempting to pass another steamer and her tow in St. Mary's river, against the dissenting signals of the forward vessel, held solely in fault for the resulting collision. The North Star, 108 Fed. Rep. (U. S.) 436.





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### TREASURY DECISIONS.

#### YACHTS.

American-owned foreign-built pleasure vessels are subject to tonnage tax, etc., on arrival in the United States.

Treasury Department, Bureau of Navigation,  
WASHINGTON, D. C., July 17, 1901.

Sir:—This office is in receipt of your letter, dated the 15th instant, requesting instructions relative to the foreign-built yacht *Caress*, purchased by an American citizen May, 1901, and brought to your port direct from Scotland with, as the Bureau understands, no other paper than a bill of sale to an American citizen. The correspondence does not show that the bill of sale was recorded at an American consulate or at a custom-house of the United States, or that the yacht belonged to a regularly organized yacht club of a foreign nation.

The act of February 8, 1897, provides that none of the privileges of section 4,216, Revised Statutes, accorded by the section to yachts entering or leaving any port in the United States, shall extend to a foreign-built yacht owned by a citizen of the United States unless the ownership was acquired prior to the passage of the act, and it repeals section 11 of the act of June 19, 1886, so far as that statute exempts yachts built outside of the United States from the payment of tonnage taxes. The Bureau's circular of August 26, 1897, stated that in view of this legislation such yachts would be subject to tonnage tax in the United States in the same manner as vessels engaged in trade.

Regular tonnage dues should be levied on the *Caress* at the maximum rate under section 11, act of June 19, 1886; tonnage tax of 50 cents per ton should be assessed under section 4,219, Revised Statutes, and light-money, of 50 cents per ton, should be collected under section 4,225, Revised Statutes. The payments may be made under protest, if the private persons concerned think proper.

The case differs somewhat from that of the yacht *Lady Evelyn*, mentioned in the decision of October 17, 1900 (T. D. 22,547), that vessel having been purchased by an American citizen before the passage of the act of February 8, 1897.

Respectfully,

T. B. SANDERS, Acting Commissioner.

Collector of Customs, Marblehead, Mass.

### RULES AND REGULATIONS FIXING SALARIES OF INSPECTORS OF STEAM VESSELS.

[CIRCULAR NO. 79.]

TREASURY DEPARTMENT, July 23, 1901.

To supervising and local inspectors of steam vessels:

Under the provisions of section 4,414 of the Revised Statutes of the United States, as amended by the act of Congress approved March 1, 1895, it is provided that the salaries of the local inspectors of steam vessels shall be regulated in proportion to the number of steamers inspected in each of the various districts, as follows:

In districts inspecting 100 steamers and less, to a salary of \$1,200 per year each.

In districts inspecting over 100 and less than 150 steamers, to a salary of \$1,500 per year each.

In districts inspecting 150 and less than 200 steamers, to a salary of \$1,800 per year each.

In districts inspecting 200 and less than 300 steamers, to a salary of \$2,000 per year each.

In districts inspecting 300 and less than 500 steamers, to a salary of \$2,250 per year each.

In districts inspecting 500 steamers and upward, to a salary of \$2,500 per year each.

The act further provides that the basis of salaries from the date of approval of the act of March 1, 1895, shall be on the report of inspections for the preceding year, and thereafter according to the number of steamers reported inspected at the end of each fiscal year, which shall regulate the salaries for the following year for each local board, as reported by the Supervising Inspector-General.

Therefore, in accordance with the report of that officer for the fiscal year ended June 30, 1901, the salaries of local inspectors of hulls and local inspectors of boilers

from July 1, 1901, to June 30, 1902, inclusive, are hereby established, as follows:

For the districts of Evansville, Ind.; Louisville, Ky.; Memphis, Tenn.; Nashville, Tenn.; Cincinnati, Ohio; Gallopis, Ohio; Wheeling, W. Va.; Burlington, Vt.; Bangor, Me.; Galveston, Tex., and Apalachicola, Fla., at the rate of \$1,200 per year for each local inspector.

For the districts of New Haven, Conn.; Savannah, Ga.; Charleston, S. C.; Dubuque, Iowa; Pittsburg, Pa.; Superior (Marquette), Mich.; Jacksonville, Fla., and Toledo, Ohio, at the rate of \$1,500 per year for each local inspector.

For the districts of St. Louis, Mo.; Oswego, N. Y.; New London, Conn.; Portland, Me.; Detroit, Mich.; Mobile, Ala.; Portland, Ore.; and Port Huron, Mich., at the rate of \$1,800 per year for each local inspector.

For the districts of Puget Sound (Seattle), Wash.; Albany, N. Y.; Grand Haven, Mich.; Providence, R. I.; Milwaukee, Wis.; Cleveland, Ohio; Chicago, Ill.; Norfolk, Va.; Duluth, Minn., and Juneau, Alaska, at the rate of \$2,000 per year for each local inspector.

For the districts of Philadelphia, Pa.; Boston, Mass.; Baltimore, Md.; Buffalo, N. Y.; New Orleans, La., and San Francisco, Cal., at the rate of \$2,250 per year for each local inspector.

For the district of New York, N. Y., at the rate of \$2,500 per year for each local inspector.

L. J. GAGE, Secretary.

#### FISH.

Fish Caught by American Citizens.—Fish caught in Canadian waters by Canadian citizens in the employ of an American corporation are not "fish caught by citizens of the United States," within the meaning of paragraph 555, tariff act of 1897.—*Lake Ontario Fish Company v. United States* (99 Fed. Rep., 551), affirming in principle in *re Booth Packing Company* (G. A. 4,004) and in *re Buffalo Fish Company* (G. A. 4,006).

Skinned Fish.—Although paragraph 259 covers fresh-water fish not specially provided for, yet where such fish are skinned they fall within the purview of paragraph 261, which expressly mentions "fish skinned or boned."—*Lake Ontario Fish Company v. United States* (Id.), affirming in principle in *re Davis' Fresh and Salt Fish Company* (G. A. 4,005).

Before the U. S. General Appraisers at New York, July 20, 1901.

In the matter of the protests, 38,991-b, etc., of *Lake Ontario Fish Company*, against the decision of the collector of customs at Cape Vincent, N. Y., as to the rate and amount of duties chargeable on certain merchandise, imported as shown on the schedule.

OPINION BY SOMERVILLE, GENERAL APPRAISER.

The importations under consideration were made by the *Lake Ontario Fish Company*, and consist of fresh-water fish, some of which have been skinned. The collector assessed duty upon them either at one-quarter of a cent per pound, under paragraph 259 of the tariff act of 1897, or at 1 1/4 cents per pound, under paragraph 261 of said act. Those paragraphs read as follows:

259. Fresh-water fish not specially provided for in this Act, one-fourth of one cent per pound.

261. Fish, fresh, smoked, dried, salted, pickled, frozen, packed in ice or otherwise prepared for preservation, not specially provided for in this Act, three-fourths of one cent per pound; fish, skinned or boned, one and one-fourth cents per pound; mackerel, halibut or salmon, fresh, pickled or salted, one cent per pound.

The importers' claim is based on the following paragraph of the free list:

555. Fish, fresh, frozen, or packed in ice, caught in the Great Lakes or other fresh waters by citizens of the United States.

The record shows that the fish were caught in Canadian waters by Canadian fishermen and were then imported by the *Lake Ontario Fish Company*, which is a New York corporation. The question thus raised is whether fish caught by Canadian citizens in the employ of a New York cor-

poration can be deemed to be "caught in the Great Lakes or other fresh waters by citizens of the United States," within the meaning of said paragraph 555. A precisely similar issue was decided by the Board of General Appraisers in the case of *in re Booth Packing Company* (G. A. 4,004), and also in *re Buffalo Fish Company* (G. A. 4,006), which decisions were affirmed in principle by the United States circuit court for the northern district of New York in *Lake Ontario Fish Company v. United States* (99 Fed. Rep. 551), Judge Coxe observing as follows:

It was conceded upon the argument that the importer is a New York corporation. \* \* \* The fish in question were caught in the Bay of Quinte, an arm of Lake Ontario, in Canadian waters, by citizens of Canada.

It is argued that the importer, being a New York corporation, is a citizen of the United States; that a corporation can only act through agents, and the fish in question, being caught by its employees, were constructively caught by it.

The soundness of this argument, however, was not admitted by the court, whose conclusion was that, to obtain the benefits of said paragraph 555, "the citizen must be present and actually engaged in catching the fish."

The court further held that, although paragraph 259 provides for a duty upon fresh water fish not specially provided for, yet as the fish imported were skinned they were properly covered by the specific language of paragraph 261, "fish skinned or boned." (See in *re Davis' Fresh and Salt Fish Company*, G. A. 4,005.)

We are officially advised that the importers have prosecuted no appeal from this decision of the circuit court; and in accordance with the principles thus enunciated, we overrule the protests and affirm the decision of the collector.

### NOTICE TO MARINERS.

BRANCH HYDROGRAPHIC OFFICE,  
CLEVELAND, O., July 31, 1901.

Notice has been received that the gas buoy on Gull Island Shoal, Lake Erie, was relighted on the 29th instant.

GEO. R. CLARK,  
Lieut. Comdr., U. S. Navy, in charge.

### DOMINION OF CANADA—ONTARIO.

Wreck of the *Specular*.—With further reference to notice to mariners, part 1, of No. 79, of 1900, and part 4 of No. 25 of 1901, Capt. Dunn of the D. G. S. "*Petrel*," reports that he has discovered a spot on this wreck with only 11 feet of water on it.

The locality will be examined and further notice given.

Survey buoys placed temporarily in St. Lawrence river.—Notice has been received from the Department of Public Works that a number of white spar buoys are to be placed at various points in the St. Lawrence river, between Prescott and Kingston during the coming season by the engineers engaged in surveying that portion of the river.

It should be distinctly understood that these buoys are for survey purposes only and are not intended as a guide to vessels.

Mariners are earnestly requested not to interfere with these buoys in any way.

Captain William S. Hoag, of the "*James B. Neilsen*," reports that the sunken wreck of the schooner "*Charles Foster*," which foundered off Erie harbor in December, 1900, is a dangerous obstruction to vessels. The wreck is about 7 8-10 (9) miles W. by N., (N. 82° W. true) from Presqu'île lightstation, and one of its masts projects 5 feet above the water at an angle of about 45°.

F. GOURDEAU,  
Deputy Minister of Marine and Fisheries,  
Department of Marine and Fisheries,  
Ottawa, Canada, 5th July, 1901.

Construction of Policy.—Ambiguities or contradictions in different clauses of a policy, in the absence of any controlling indications of intent, are to be resolved against the insurer. *American S. S. Co., Limited, vs. Indemnity Mut. Marine Ins. Co., Limited*, 108 Fed. Rep. (U. S.) 421.



## A TERRIBLE EXPERIENCE.

(BY THE MAN ON THE DOCK.)

The yacht races at Chicago have brought about much excitement and some confusion at the Club House of the Chicago Yacht Club.

The other day I heard one of the waiters telling another waiter of the terrible ordeal that the yacht Detroit underwent on her trip from Milwaukee to Chicago.

One o' them fellows on the Detroit told me all about that trip, it was terrible—they got caught in a storm, you know, and the wind was blowing so hard that it blew 15 knots in the ropes and was going 20 miles an hour. When the storm first hit 'em the Captain told 'em, I aint got only 12 reefs aboard and we better put some of 'em in the mainsail, so we put 8 in first and we kept putting 'em in until we had the hull 12 in and then she kept tippin' and her spreaders got in the water but this done no damage till the port spreader sprung a leak and then the water commenced to come down into the hollow mast, and then we was in a fix. The water rushed through the spreader into the mast until it was all filled up and something had to be done to pump the mast out—for hollow masts is terrible dangerous when they get filled. Well, we sent a man down in the basement of the boat to pull the plug out of the mast, but he nor none of us could do it, and I don't know what we would have done if it had not been for one of our men being from Kentucky and having a corkscrew with him. He pulled the cork out and that emptied the mast.

When we started we had a companionway, but it got so dark that we lost our companionway and then our gasket blew out and we could not see our compass and we could not light the gasket again. The only way we could see the compass was by the light water mark, and in them big waves this was hard to see.

Well, the storm kept getting worse and worse and they all got terrible scared and it was pretty hard. Well, sir, after carrying away the fore-castle back stay they was in awful bad shape, but they used the mizzen topping lift and that helped them out, but they bent a lot of ropes all out of shape and parted all their bedclothes, putting them into the hole, and then they lost all their shrouds, but the worst thing that happened to them was they got their gar-board streak soaking wet, and the man said it was the closest call he ever had and he never wanted another, although he had been all through the Detroit River rapids and over the dangerous middle ground at Belle Isle, and he had been in the Detroit naval militia, too, and often said he had his life in both hands many times, but he didn't want any more of that kind of experience, and he looked pretty tough, and he said he wanted a shave and then he would reform, and he needed it.

## MAKING OF SUBMARINE CABLES.

One of the great submarine telegraph cable-making works in Germany covers an area of 120,000 square yards, about three-quarters of which is under roof. Castings are produced of copper bronzes and aluminum; and in the mill three double sets of rolls, arranged in two rows, reduce within a few minutes the copper bars, mostly electrolytic American copper, to 300 yards of wire of 1/4-inch. The further reduction of the copper and bi-metal wires to fine wires of the smallest gauges is effected by means of diamond dies which yield wires two-thousandths part of an inch in diameter. The diamonds are mounted in

copper, which is cast round them, pierced, and applied in multiple sets, consisting of a series of trays diminishing in size from the lowest to the top tray. The drawn wire is cleaned of oxide in baths of sulphuric acid and annealed in special furnaces, unless to be employed hard drawn. Copper plates of oval shape are rolled in Krupp machines, and then converted into a long narrow ribbon by a machine which makes its cut near the circumference. The hot lead presses for the cable sheaths are of the Huber system. For the insulation tests, the pressure can be raised to 50,000 volts alternating. Stabilit is used for insulation. This flexible stabilit, owing to its high insulating strength, can be applied in very thin layers. In the halls for the preparation, the masticating, kneading and pressing of rubber and gutta-percha, the electric motors are placed along the walls, and drive the respective rolls by means of long belts. Sulphur chloride is used for vulcanizing, and the vapors are drawn off from below. The rubber is applied to wires both by the tape method and the die method, which yields a seamless covering—Engineering.

## CIRCLING THE GLOBE.

Charles C. Fitzmorris, a boy who was sent around the world on a time race by the Chicago American newspaper, arrived in Chicago July 20th, having made the tour in 60 days, 13 hours, 29 minutes and 42-4-5 seconds. The distance covered by land and sea was 20,455 miles. His route was by way of the Siberian railroad as far as completed and the Amur river. His record was as follows:

By water—	Miles.
Ocean steamers .....	8640
Channel boats .....	235
River steamers .....	1100
Rowboat .....	300
Tugboat .....	75
Ferryboats .....	40

Total .....	10,390
By railroads or land .....	10,055

Total .....

The Russian minister of railroads estimates that when the Siberian road is completed the whole trip can be made in thirty-three days, little more than half the present time, providing only that the fastest trains are taken and there is no missing of connections. His estimate of the stages of the journey is:

	Days.
St. Petersburg to Vladivostok .....	10
Vladivostok to San Francisco .....	10
San Francisco to New York .....	4 1/2
New York to Bremen .....	7
Bremen to St. Petersburg .....	1 1/2
Total .....	33

THE State Department has learned through Consul Kehl, at Stettin, that operations have begun on the proposed ship canal between St. Petersburg and the White Sea. The naval port, Cronstadt (the entrance to St. Petersburg), is to be connected with the new naval harbor, Sorotskaja, on the White Sea, by a canal of sufficient breadth and depth to admit the passage of Russia's largest cruisers. The extreme depth will be 31 feet, while the water surface will have a breadth of 200 feet. The length of the canal will be 963 kilometres (about 602 miles).

## SUN'S AMPLITUDES.

The following approximate amplitudes of the Sun's rising or setting will be given each week in this column during the season of navigation. A second bearing may be taken by compass at sunset, by reversing the east bearing given for the nearest latitude, as the change in declination for a few hours makes but a slight difference in the true bearing of the Sun's setting. The bearing may be taken when the Sun's center is on the horizon, rising or setting. The elements which may be obtained by taking these amplitudes are the quantities known as local attraction, variation and deviation, or the total difference between compass and true, or geographical bearings.

LAKE ERIE AND S. END LAKE MICHIGAN, LAT. 42° N.

Date. Amplitude. Bearing P'ts. Bearing Comp.

Aug. 2....E. 25° N. = N. 5 3/4 E. = N. E. by E. 3/4 E.

Aug. 5....E. 23° N. = N. 6 E. = E. N. E.

Aug. 9....E. 22° N. = N. 6 E. = E. N. E.

LAKE ONTARIO, S. END HURON AND CENTRAL, PORTION LAKE MICHIGAN, LAT. 44° N.

Date. Amplitude. Bearing P'ts. Bearing Comp.

Aug. 2....E. 25° N. = N. 5 3/4 E. = N. E. by E. 3/4 E.

Aug. 5....E. 24° N. = N. 5 7/8 E. = N. E. by E. 7/8 E.

Aug. 9....E. 23° N. = N. 6 E. = E. N. E.

N. END LAKES HURON AND MICHIGAN, LAT. 46° N.

Date. Amplitude. Bearing P'ts. Bearing Comp.

Aug. 2....E. 26° N. = N. 5 5/8 E. = N. E. by E. 5/8 E.

Aug. 5....E. 25° N. = N. 5 3/4 E. = N. E. by E. 3/4 E.

Aug. 9....E. 23° N. = N. 6 E. = E. N. E.

LAKE SUPERIOR, LAT. 48° N.

Date. Amplitude. Bearing P'ts. Bearing Comp.

Aug. 2....E. 27° N. = N. 5 5/8 E. = N. E. by E. 5/8 E.

Aug. 5....E. 26° N. = N. 5 3/8 E. = N. E. by E. 3/8 E.

Aug. 9....E. 24° N. = N. 5 7/8 E. = N. E. by E. 7/8 E.

With a compass correct magnetic, the difference between the observed and true bearing or amplitude will be the variation for the locality. Should there be any deviation on the course the vessel is heading at the time of taking the bearing, the difference between the observed and the true amplitude after the variation is applied will be the amount of deviation on that course. If the correct magnetic bearing is to the right of the compass bearing, the deviation is easterly, if to the left, the deviation is westerly.

THE four-day-to-Europe steamer is now in evidence. The Deutschland, of the Hamburg-American line, leaving New York July 11, crossed to Plymouth at an average speed of 23.51 knots an hour, covering 3,082 miles in 5 days, 11 hours and 5 minutes. Had she taken the shorter Liverpool route she would have made the run over in 4 days and 18 hours.



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Minnesota Iron Co.'s steamer Presque Isle.

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portation Co.'s steamer Manitou.

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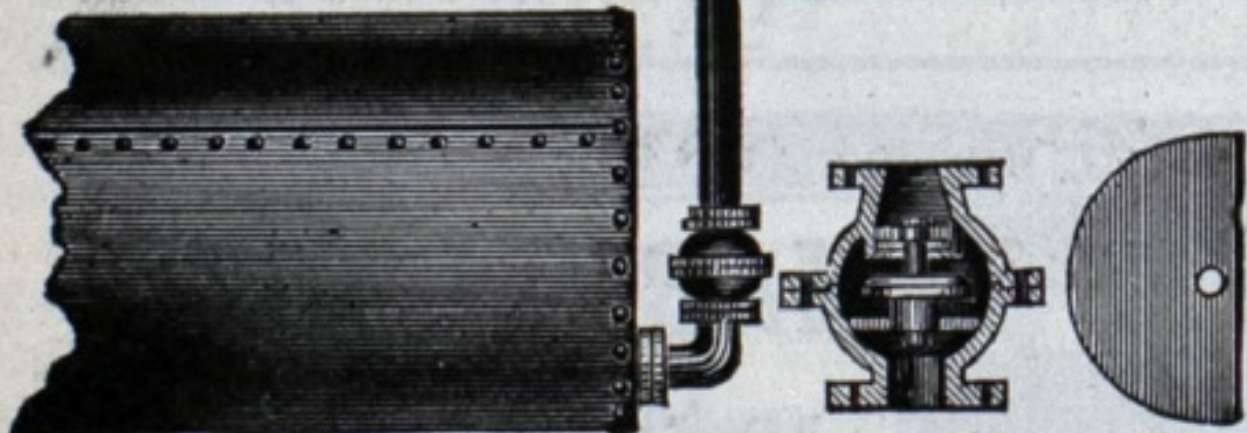
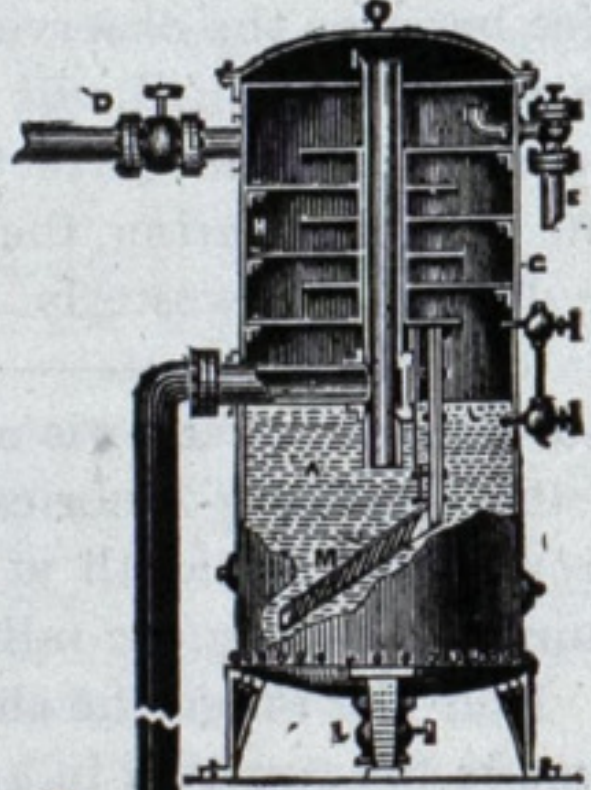
American Transportation Co.'s steamers  
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Wilson Transit Line's steamers W. D. Rees  
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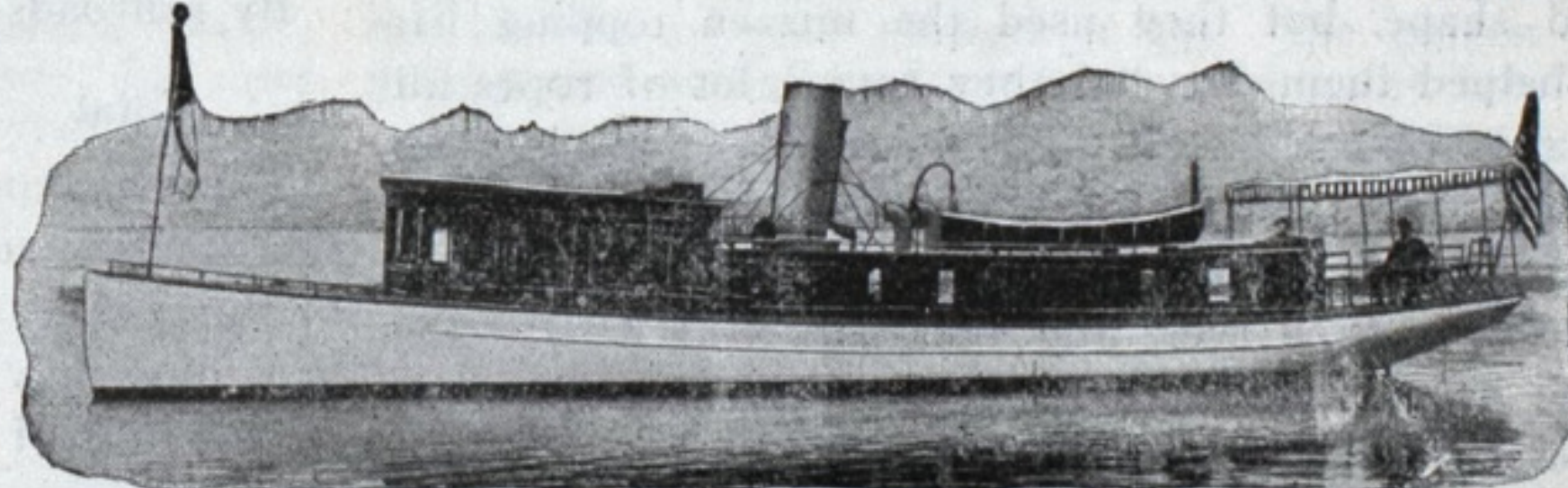
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## THE SEA SERPENT LEAVES HOME TO FILL SUMMER ENGAGEMENTS.

"Now, my dears," said the widowed sea serpent as she called the children and sat down to a light lunch of jet-tisoned bananas and jellyfish, "I must leave you and start for the Jersey coast.

"But before I go I want you to listen to me. Pass the anemone salad, please. As you know, my first appearance this season is at Atlantic City, as usual, and I am booked solid right through the summer. They're lighting kitchen fires with money in the States, and the whole push, from Illinois to Oklahoma, is coming East to dally with the sad sea waves and the elusive nine spot, all of which means business for your mamma.

"But beware, my dears, of tempting offers in my absence. Stay at home. There are only a few of us left. Remember that it's nicer here than playing Terre Haute and Pittsburg in a tank car. Your turn will come.

"After this season I shall rest for a year in our cave near the gulf of Aden or else go to Australia, where I have promised to appear in some new undulations.

"Don't worry about me in my absence. The hotel men on the Atlantic circuit are my friends. They pay my accident insurance. I have confidence in them. And remember not to eat any of those green crabs that poisoned your poor father."

So saying, she bade them goodbye, and gazing on them fondly with eyes that glistened like two washtubs full of brass filings, she floated away. Then, suddenly stopping, she called back to them:

"Is my dorsal fin on straight?"

They nodded assent, and she disappeared amid the green shadows.—Life.

## REPORTED BY THE LOOKOUT.

A new tug is building at Sturgeon Bay for Smith Bros. of Waukegan, and will be ready for work in a short time. The tug is 73 feet long and 15½ feet beam, and cost \$7,000.

Capt. Cameron of the steamer Aletha, was summoned Monday morning to appear at the police court Thursday for landing his boat at Brockville on Sunday. The case promises to be an interesting one and they threaten a counter action against the town. This too, at the fag end of the nineteenth century.

Many attempts are now being made to discover the North Pole by adventurous explorers, the last among them being Capt. Bernier of Quebec, who will take with him strong kites fitted with cameras, by which, even if he fails to get near the Pole, he proposes to take photographs of such points as he cannot reach. The success that has attended the use of the camera by the aid of kites at great heights leads him to believe that the method may be practicable in the Arctic regions.

The Washington correspondent of the Philadelphia Ledger calls attention to the fact that the world-famous dispatch of Commodore Perry reporting the battle of Lake Erie is not on record. According to all the popular accounts, Perry's dispatch said: "We have met the enemy and they are ours," followed by an enumeration of the force captured. This correspondent says that no such dispatch ever reached the Navy Department, and he quotes Perry's report to the Secretary of the Navy, in which no such expression occurs.

During the past two weeks 23 Norwegian steamships have been chartered for the West India fruit trade. Their charters are for periods varying from 12 months to five years, and are to trade from Jamaica, Cuba and Central American ports to Philadelphia, New York and Baltimore. The English and American steamers have been practically driven

out of the trade. The Scandinavians, not content with their conquests in the fruit trade are supplying tonnage for other lines of West India trade, particularly the Cuban coal trade and the Gulf of St. Lawrence.

Noah's Ark is generally supposed to be the earliest craft of which we have any record, but there exists paintings of Egyptian vessels immensely older than the date 2800 B. C., usually assigned to the Ark, being indeed, probably between 70 and 80 centuries old. Moreover there are now in existence in Egypt boats which were built about the period the Ark was constructed. These are, however, small craft, about 33 feet long, 7 or 8 feet wide and 2½ to 3 feet deep. They were discovered six years ago by the eminent French Egyptologist, M. J. Morgan, in brick vaults near Claire and were, probably, funeral boats. They are constructed of three inch acacia and sycamore planks, dove-tailed together and fastened with trenails. They have floors but no ribs, and, though nearly 5,000 years old, they held rigidly together after their supports had been removed.

Burning Wharf—Towage Services.—The Coya, a steel steamship valued with her cargo, at \$230,000, was moored in the Erie Basin to a pier, from which she was breasted off about twenty feet by two intervening barges. During the night the shed on the pier was set on fire by a burning steamer, and burned. Some small boats and other articles on the upper deck of the Coya took fire, but it was extinguished by the ship's own fire apparatus, and otherwise she was uninjured. After the shed had been burning for an hour or more, the steamer was towed out of the ship to a place of safety by libellant's tugs, six of which participated, to a greater or less extent, in the service, which required about an hour. Held that, considering the fact that the ship was not at the time in present peril, \$3,450 was a reasonable and proper allowance for the salvage services, to be divided between the tugs and their masters and crews, in proportion to the services rendered by each. The Coya, 108 Fed. Rep. (U. S.) 413.

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"Passenger Lines on the Lakes,"  
page 18.

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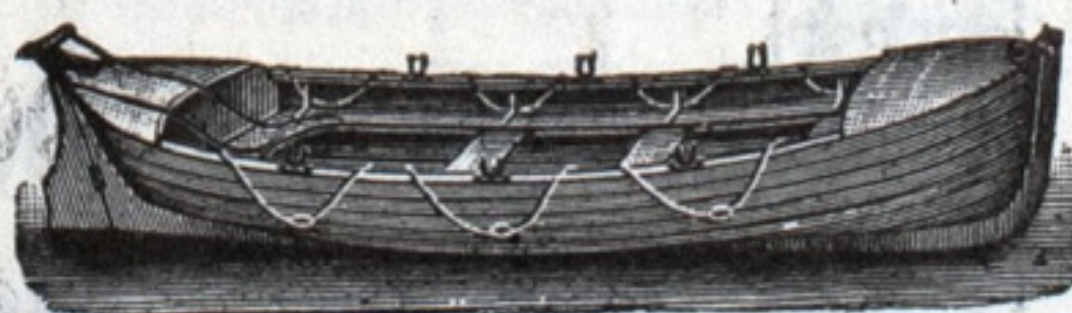
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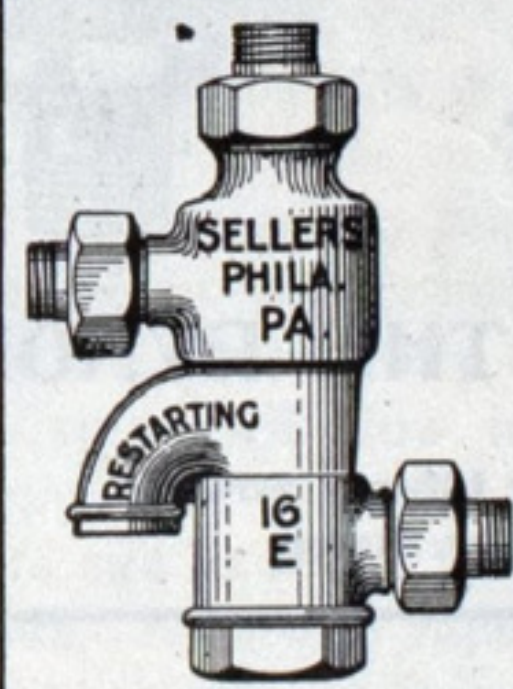


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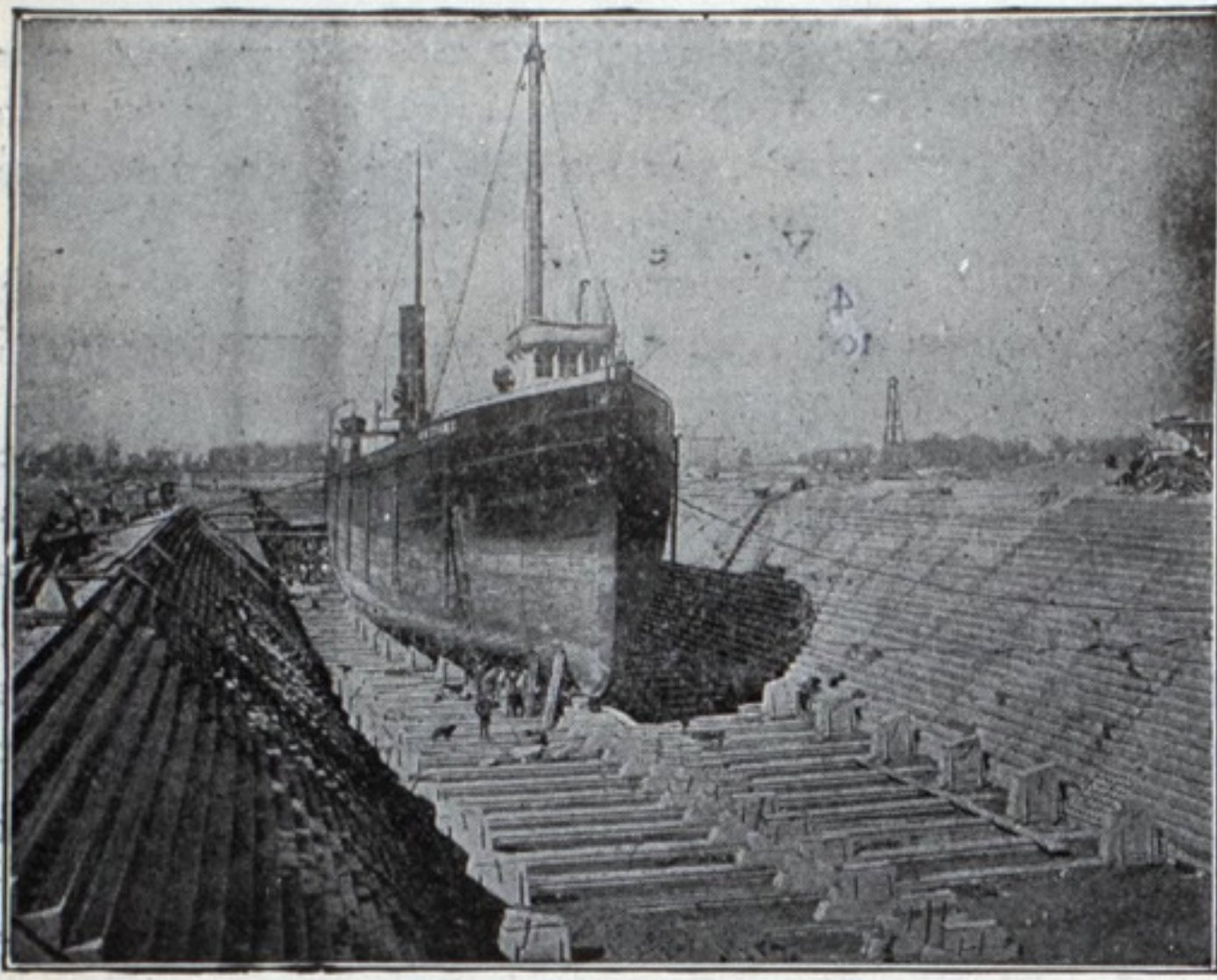
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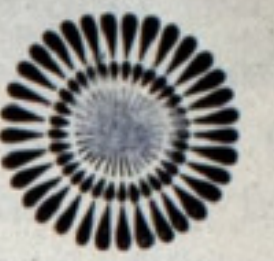
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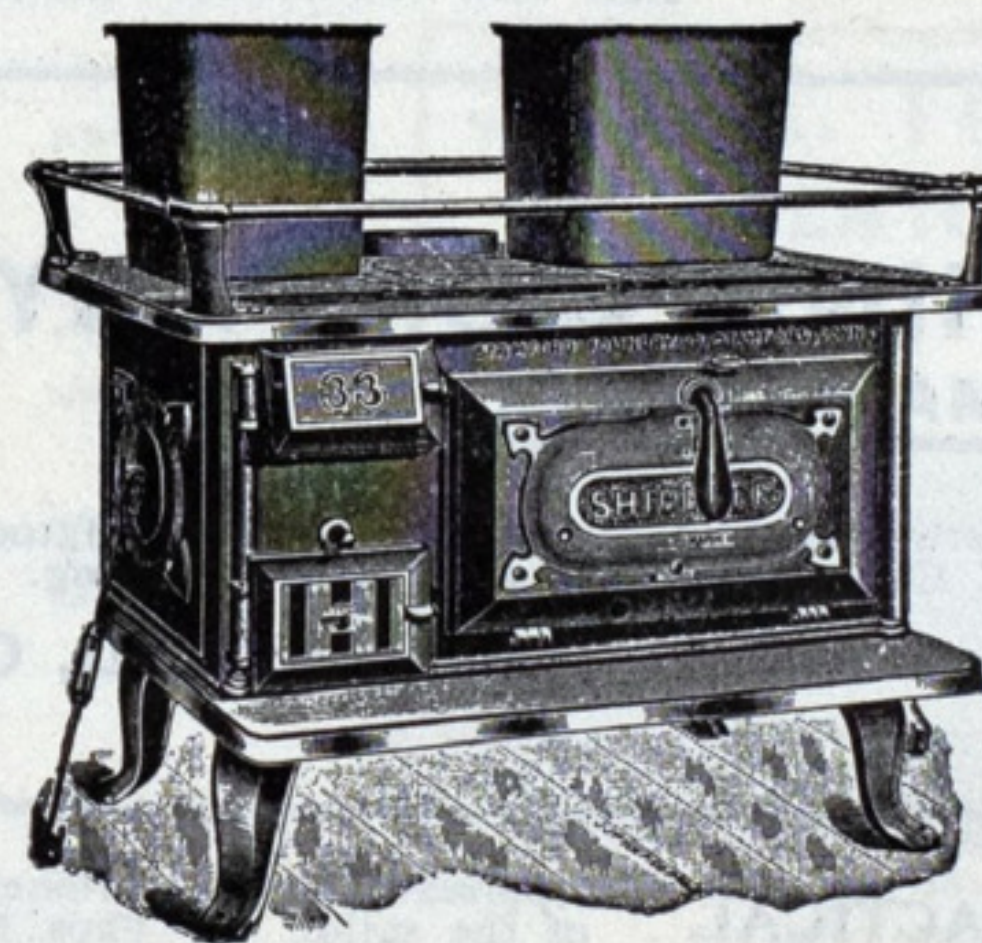
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